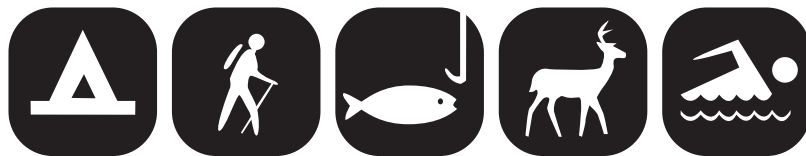


2013 SCORP



Statewide Comprehensive Outdoor Recreation Plan

DRAFT

Arizona Outdoor Recreation
Coordinating Commission

September 7, 2012

Governor of Arizona

Janice Brewer

Arizona State Parks Board

Walter D. Armer, Jr., Chair

Maria Baier

Kay Daggett

Alan Everett

Larry Landry

William C. Scalzo

Tracey Westerhausen

Arizona Outdoor Recreation Coordinating Commission

William Schwind, Chair

Wayne Lackner

Benjamin Reeves

Jeff Spellman

Larry Voyles

Bryan Martyn

This publication was prepared under the authority of the Arizona State Parks Board.

Prepared by the Resources & Public Programs Section

Arizona State Parks

1300 W. Washington St.

Phoenix, AZ 85007

(602) 542-4174

Fax: (602) 542-4180

www.AZStateParks.com

The preparation of this report was under the guidance from the National Park Service, U.S. Department of the Interior, under the provisions of the Land and Water Conservation Fund Act of 1965 (Public Law 88-578, as amended). The Department of the Interior prohibits discrimination on the basis of race, religion, national origin, age or disability. For additional information or to file a discrimination complaint, contact Director, Office of Equal Opportunity, Department of the Interior, Washington, D.C. 20240.

September 2012

ARIZONA

DRAFT

**2013 Statewide Comprehensive Outdoor
Recreation Plan Update**

(SCORP)

**Arizona State Parks
September 2012**



ACKNOWLEDGMENTS

The 2013 Statewide Comprehensive Outdoor Recreation Plan (SCORP) was prepared as an update to the 2008 plan, which was completed under the leadership of Tanna Thornburg, Chief of Planning, Resources Management Section of Arizona State Parks with assistance from many other sections and agencies.

Research, editing, reviewing and updates for the 2013 plan was accomplished through the combined efforts of the Resources and Public Programs section at Arizona State Parks with assistance from many other sections and agencies.

Dawn Collins, Research Project Manager; Annie McVay, Resource Planner; Katharine Schinzel, Research and Marketing Project Manager; & Doris Pulsifer, Chief of Resources and Public Programs, Editors, reviewers, researchers

Additional assistance, research and data provided by Arizona State Parks staff:

Tye Farrell, Marketing Project Manager, Marketing and Public Information Section
Pat Dutrack, Grants Coordinator, Resources and Public Programs Section
Robert Baldwin, Grants Coordinator, Resources and Public Programs Section
Eric Vondy, State Historic Preservation Office

A special thanks to the following individuals who contributed new research and written sections of the SCORP:

- Arizona Game & Fish Department, Jimmy Simmons, OHV Law Enforcement Program Manager
- Arizona Office of Tourism, Melissa Elkins, Research Manager

Photographs

Unless specified, all photographs are the property of Arizona State Parks. Other photos courtesy of Shawn Blackburn (Mohave County Parks), Arizona Office of Tourism, Maricopa County Parks and Pima County Parks.

A heartfelt and sincere thank you to the members of the 2013 SCORP Work Group, who committed their time and expertise to the careful review and editing of survey questionnaires, interpretation and discussion of data analysis, and suggestions for updates to grant rating criteria for the Land & Water Conservation Fund.

2013 SCORP Work Group	
Rafael Payan	Director, Pima County Natural Resources, Parks and Recreation
R.J. Cardin / Leigh Johnson	Director, Maricopa County Parks and Recreation Department Park Planner, Maricopa County Parks and Recreation Department
Don Applegate	AZ Recreation Program Lead, Bureau of Land Management State Office
Shawn Blackburn	Director, Mohave County Parks
Cathy Wise	Education Director, Audubon Arizona
Cate Bradley	Landscape Architect, Rivers, Trails and Conservation Assistance, National Park Service
Lee Eseman	Acting Chief of Operations, Arizona State Parks
Jody Latimer	Manager, Environmental Resources and Trespass, AZ State Land Department
Mary Dahl	Santa Cruz County Department of Parks, Open Space and Cultural Services
John Vuolo	Director of Parks and Recreation, Town of Pinetop-Lakeside
Sharon Wallace	Public Services Group Leader, Tonto National Forest
Alex Wisniewski	Maintenance Manager, Coconino County Parks and Recreation
Jimmy Simmons	OHV Law Enforcement Program Manager, AZ Game & Fish Dept.
Melissa Elkins / Dawn Melvin	Research Manager, AZ Office of Tourism Tribal Tourism Relations Manager, AZ Office of Tourism
Bill Schwind	Director, Casa Grande Parks and Recreation Department

Also, thank you to the Involved Recreation Users and Recreation Providers for participating in the surveys.

TABLE OF CONTENTS

SCORP Executive Summary	1
Chapter 1: Introduction	9
Land and Water Conservation Fund	9
Background and Legal Authority	9
LWCF Funding	9
Statewide Comprehensive Outdoor Recreation Plan	12
Background	12
Arizona State Parks' Administered Grant Programs	12
Awarded Grants and Funded Partnerships	13
Chapter 2: Planning Process	18
Arizona 2013 SCORP Work Group	18
The Purpose and Scope of the 2013 SCORP	18
Recreation Provider and Public Surveys	19
Draft and Final Plans	21
Chapter 3: Importance of Outdoor Recreation	22
What is Recreation?	22
What is Outdoor Recreation?	22
City Parks	23
Benefits of Parks and Open Space	26
Personal/Health Benefits	27
Economic Benefits	29
Environmental Benefits	33
Social Benefits	35
Chapter 4: Outdoor Recreation Situation and Trends	37
Influences on Recreation in Arizona	37
Land Ownership	37
Arizona's Population Growth	38
National Park Visitation	41
State Park Visitation	42
Arizona's Recreation Providers	45
National Trends in Outdoor Recreation Activity	50
Trends in Collaborative Planning and Partnerships	58
Other Statewide Recreation Elements	
Outdoor Recreation and the Arizona Office of Tourism	SEE SUPPLEMENT
Historic Preservation and Outdoor Recreation In Arizona	60
Recreational Trails in Arizona	66
Boating Recreation in Arizona	74
Wildlife Related Recreation in Arizona	76
National Wetlands Priority Conservation Plan	87

Chapter 5: 2013 SCORP Survey Findings	92
Involved Recreation Users’ Responses Regarding Outdoor Recreation Participation, Future Demand and Issues	92
Overall Demographics	93
Recreation Settings	102
Funding Priorities	104
Changes to Outdoor Recreation in the Last 5 Years.....	113
Outdoor Recreation Issues	117
Involvement in Outdoor Recreation Issues.....	121
Recreation Benefits.....	129
Participation in Outdoor Recreation Activities.....	130
 Chapter 6: Arizona’s Seven Priority Outdoor Recreation Issues	 142
Secure Sustainable Funding.....	143
Improve Collaborative Planning and Partnerships	144
Respond to the Needs of Special Populations and Changing Demographics	145
Resolve Conflicts.....	146
Secure Access to Public Lands	148
Protect Arizona’s Natural and Cultural Resources	148
Communicate with and Educate the Public	149
 Chapter 7: Open Project Selection Process (OPSP)	 151
Land and Water Conservation Fund	
Process	151
LWCF Grant Program Details	153
FY 2013 LWCF Rating Criteria	157
 References	 162
 Appendices	 167
A. LWCF Projects.....	168
B. LRSP Projects	
C. Maps	

TABLES

Table 1. LWCF Annual Apportionments to Arizona 1965 through 2012	11
Table 2. Arizona State Parks Awarded Competitive Grants from FY 2007-FY 2011	16
Table 3. Arizona State Parks Funded Partnerships from FY 2007-FY 2011.....	16
Table 4. Outdoor Recreation Grant Programs from FY 2007 through FY 2012.....	16
Table 5. Breakdown of LWCF and LRSP Totals by Applicant Type FY2007-FY2012	17
Table 6. Percent of Grant Dollars Awarded by Applicant Type FY2007-FY2012.....	17
Table 7. 2013 SCORP Work Group	18
Table 8. National Ranking of Arizona Cities with Largest City Parks	25
Table 9. Total Parkland as a Percent of Place Area (2011)	25
Table 10. Acres of Parkland per 1000 Residents, by Place (2011).....	25
Table 11. Park-related Expenditures per Resident, by Place (2011)	25
Table 12. Community Benefits of Parks, Open Space and Outdoor Recreation.....	26-27
Table 13. Personal/Health Benefits and Outcomes	27
Table 14. Economic Benefits and Outcomes	29
Table 15. Economic Contribution of National Outdoor Recreation Spending by Activity	32
Table 16. Environmental Benefits and Outcomes	33
Table 17. Social Benefits and Outcomes	34
Table 18. Arizona State Parks Visitation-Comparing FY2007 and FY2011	43
Table 19. Total Visitor Expenditures In and Around Arizona State Parks	44
Table 20. Trends In Participation of Outdoor Recreation Activities.....	53
Table 21. Top 5 Popular and Favorite Outdoor Activities of Americans.....	54
Table 22. Trails Plan 2010 Nonmotorized Trail Recommendations	67
Table 23. Trails Plan 2010 Motorized Trail Recommendations.....	69
Table 24. Summary of Big Game Hunt Applicants and Permits Issued	79
Table 25. Summary of Small Game Hunter Participation.....	79
Table 26. Trend in Select Big Game Applications	80
Table 27. Trend in Number of Small Game Hunters	80
Table 28. Priority Wetland Types	89
Table 29. Demographics of High Frequency User Groups	96
Table 30. Ethnicity of High Frequency User Groups	96
Table 31. Employment Status of High Frequency User Groups	97
Table 32. Disability Status of High Frequency User Groups	97
Table 33. Percentage of Arizona Residents by County.....	98
Table 34. Employment Status of Arizona Residents	98
Table 35. Ethnicity of Arizona Residents.....	99
Table 36. Disabilities of Arizona Residents	99
Table 37. Importance of Recreation Settings - Involved Recreation Users	102
Table 38. Importance of Recreation Settings By High Frequency User Groups	103
Table 39. Importance of Recreation Settings - Land & Water Based Activities: Mean Value	103
Table 40. Funding Priorities - Arizona Residents	104
Table 41. Funding Priorities By High Frequency User Groups - Arizona Residents - Visit/Learning Activities: Mean Value	106
Table 42. Funding Priorities By High Frequency User Groups - Arizona Residents – Land & Water-Based Activities: Mean Value	107
Table 43. Funding Priorities – Providers	110
Table 44. Importance of Meeting the Needs of Specific Groups – Providers.....	111
Table 45. Opportunities Providers by my Agency for Specific Groups- Providers	111
Table 46. Importance of Meeting the Needs of Specific Groups - Arizona Residents	112
Table 47. Other Specific Groups Identified By Involved Recreation Users	113
Table 48. Outdoor Creation Issues - Arizona Residents	117
Table 49. Outdoor Creation Issues By High Frequency User Groups - Arizona Residents	118
Table 50. Issues Related to Recreation Use Conflicts – Providers	119
Table 51. Issues Concerning Law Enforcement & Safety – Providers	120
Table 52. Issues Concerning Resource Protecting – Providers	121
Table 53. Top 20 Member Affiliations/Memberships Reported	122

Table 54. Other Technology Sources Used by Involved Recreation Users	127
Table 55. Benefits of Parks, Recreation & Open Space - Involved Recreation Users	129
Table 56. Outdoor Recreation Activities Included on Involved Recreation Users & Providers Surveys By Category.....	130-131
Table 57. Participation By Involved Recreation Users in Visiting/Learning Activities.....	132
Table 58. Participation By Involved Recreation Users in Active Land Based Activities	133-134
Table 59. Participation By Involved Recreation Users in Water Based Activities	135
Table 60. Participation By Involved Recreation Users in Snow Based Activities	136
Table 61: Participation Reported by Recreation Providers for Visiting / Learning Activities - ...	137
Table 62: Current Use and Future Need Mean Ratings for Active Land-Based Activities – Providers	138
Table 63: Current Use and Future Need Mean Ratings for Water -Based Activities – Providers –	139
Table 64: Current Use and Future Need Mean Ratings for Snow -Based Activities – Providers	140
Table 65. Seven Priority Outdoor Recreation Issues For 2013 SCORP -	142
Table 66: Open Project Selection Process Traditional Funding Cycle -	155
Table 67: FY 2013 LWCF Rating Criteria -	156

FIGURES (figures in bold are color maps located at the back of the plan)**Figure 1. Arizona Landforms****Figure 2. Arizona Land Ownership**

Figure 3. Arizona's Population Growth, 1910-2005..... 39

Figure 4. Arizona Towns and Cities by Population**Figure 5. National Park Service and Arizona State Parks Map**

Figure 6. Arizona State Parks Visitation Totals FY 1998 - FY 2012..... 44

Figure 7. Arizona Wilderness Areas and Other Federal Designations**Figure 8. Arizona Boatable Lakes and Streams**

Figure 9. Trends in Outdoor Recreation Participation 51-52

Figure 10. Outdoor Recreation Trends and Future Summary 54-57

Figure 11. Arizona Hunting License Sales 81

Figure 12. Percent of Arizona Residents Who Hunt 82

Figure 13. Non-residents & Other License Sales 82

Figure 14. Resident Licenses 83

Figure 15. Percent of Arizona Hunting Licenses Purchased By Non-Residents 84

Figure 16. Arizona Game & Fish Department Owned Wildlife Areas 86

Figure 17. Overall Community Size - Involved Recreation Users 94

Figure 18. Overall Employment Status - Involved Recreation Users 94

Figure 19. Overall Racial or Ethnic Group - Involved Recreation Users 95

Figure 20. Type of Agency Represented by Providers 100

Figure 21. Providers Locations/Region By Council of Government 101

Figure 22. Primary Community Type Served by Provider Jurisdiction 101

Figure 23. Providers Years of Experience With Current Agency 102

Figure 24. Funding Priorities Provider Compared to Involved Recreation Users –
Arizona Residents 108

Figure 25. Funding Sources - Providers 109

Figure 26. Mean Ratings of Importance and Opportunities Provided By My Agency
For Specific Groups – Providers 112

Figure 27. Changes in Recreation Experiences Within Past 5 Years - Arizona Residents 116

Figure 28. Outdoor Recreation Issues - Recreation Use Conflicts – Providers 119

Figure 29. Volunteerism in the Last 5 Years - Involved Recreation Users 123

Figure 30. Likelihood of Volunteering in the Next Year - Involved Recreation Users 123

Figure 31. Assistance Strategies Helpful to Agency Goals - Providers 124

Figure 32. Types of Data Needed – Providers 125

Figure 33. Types of Technology Used - Providers 126

Figure 34. Types of Technology Used - Involved Recreation Users 126

Figure 35. Sources of Information For Outdoor Creation Opportunities - Involved Recreation
Users 128Figure 36. Visiting/Learning Activity Participation By Level of Use - Involved
Recreation Users 133

Figure 37. Land Based Activity Participation Percentage - Involved Recreation Users 134

Figure 38. Water Based Activity Participation Percentage - Involved Recreation Users 135

Figure 39. Snow Based Activity Participation Percentage - Involved Recreation Users 136

Figure 40. Current Use and Future Need Mean Ratings for Visiting / Learning
Activities - Providers 138Figure 41. Current Use and Future Need Mean Ratings for Land-Based Activities –
Providers 139Figure 42. Current Use and Future Need Mean Ratings for Water-Based Activities –
Provider 140Figure 43. Current Use and Future Need Mean Ratings for Snow-Based Activities –
Providers 141

SCORP Executive Summary

An Overview of Arizona's 2013 – 2017 Statewide Comprehensive Outdoor Recreation Plan

This update of Arizona's Statewide Comprehensive Outdoor Recreation Plan (SCORP) is in accordance with the provisions of the Land and Water Conservation Fund Act, which was enacted in 1964 to encourage the provision of greater recreation opportunities for American citizens. Arizona receives annual congressional appropriations from LWCF, administered through the Arizona State Parks Board to fund state and local government sponsored outdoor recreation projects.

The 2013 SCORP is Arizona's Outdoor Recreation Policy Plan.

SCORP's key uses are:

- Establish outdoor recreation priorities for Arizona that will help outdoor recreation and natural resource managers at all levels of government, the state legislature, and the executive branch make decisions about the state's outdoor recreation sites, programs and infrastructure.
- Set evaluation criteria to allocate the federal Land and Water Conservation Fund grants, along with other applicable grant programs consistent with the state's outdoor recreation priorities identified in this plan.
- Provide outdoor recreation managers with guidance and information to use for more specific recreation planning and budgeting.
- Encourage a better, highly integrated outdoor recreation system throughout Arizona that balances recreation and protection of natural and cultural resources.
- Strengthen the awareness of the connections between outdoor recreation with health benefits and a thriving economy.

ARIZONA'S PRIORITY OUTDOOR RECREATION ISSUES

Each State's plan must identify outdoor recreation issues of statewide importance based upon, but not limited to, input from the public participation program. The **three top priority issues**, as well as **four other issues for consideration** that address outdoor recreation in Arizona are based on the core issues identified through the SCORP planning process and the online surveys of Recreation Providers and Involved Recreation Users in Arizona. The 2013 SCORP Work Group and the State Parks staff consolidated the information into two tiers of priority issues. The two tiers of issues and associated goals and action strategies are described in more detail in Chapter 6.

The three issues of primary importance were identified as:

- **Secure Sustainable Funding**

Although sustainable funding was an issue identified in the 2008 SCORP, the need to address this issue has increased in importance due to the economic recession and resulting reductions made to many organization or agency funds and staff from 2008-2012. Existing levels of outdoor recreation funding for planning, land acquisition, construction, maintenance, operation and staffing are even more inadequate to meet the recreation needs of Arizona's residents and visitors than when this issue was identified in 2008. Resource and staffing reductions, increasing population, heavy use and inadequate maintenance are continuing to take their toll on our outdoor recreation systems statewide. Also, organizations are finding planning challenging due to uncertainty regarding what these changes mean long-term for parks and recreation organizations. Creative strategies that include a diverse array of collaborative partnerships, identification and pursuit of sustainable funding sources, grants and public/private partnerships are needed to address these gaps.

- **Improve Collaborative Planning and Partnerships**

The lands that people recreate on in Arizona are owned by a multitude of agencies, tribes, organizations and private landowners, usually in the context of a checkerboard pattern, often creating confusion and inconsistent opportunities and regulations. In addition, a reduction in resources, financial, human and other in organizations has resulted in an increased dependence on partnerships with other organizations and agencies, non-profit agencies, communities, volunteers and other collaborators to fill the gaps and maintain levels of maintenance, service and programming. As these strategies increase, the need for information about the effectiveness of these relationships and best practices for developing, training, and maintaining effective partnerships should be developed and shared among agencies and organizations.

- **Respond to the Needs of Special Populations and Changing Demographics**

Arizona's population is aging and, at the same time, the state's ethnic and cultural diversity is growing. Young people's recreational interests are changing due to a number of factors, including recent innovations in technology and electronics. Also, long-distance travel was impacted by decreasing levels of disposable income, resulting in more local visitors to recreation sites. In addition, movements to combat health epidemics through connection and increased time spent outdoors are increasing. These demographic trends may require changes in how we provide outdoor recreation opportunities and facilities.

Other issues that were identified included:

- **Resolve Conflicts**

As the sheer numbers of recreationists increase, funding and staffing in outdoor recreation managing agencies decrease and demand for different activities grows,

managing the resource impacts and conflicts that develop between these uses will become an increasingly important issue of public policy. The conflicts occur because of inability of agencies, due to staffing and funding shortages, to enforce current rules and regulations, competition between different types of recreational users, between recreational users and other land uses, and through lack of communication and coordination of land managing agencies. The cause of these conflicts must be acknowledged and strategies for resolution identified and implemented.

- **Secure Access to Public Lands**

Public access to outdoor recreation sites has been challenged by closing of public lands due to budget and staffing constraints, new residential developments, closing of private lands, and the limited ability of the resource to accommodate the demand. There is a growing need to protect, maintain, and increase access to public lands to allow for the greatest diversity of outdoor recreational users.

- **Protect Arizona's Natural And Cultural Resources**

Arizona's natural and cultural resources are at risk from increasing human activities, including recreational activities, as well as natural events exacerbated by human influences such as wildfires, flooding, erosion, the spread of invasive species and pollution. In addition, declining political support has resulted in reductions in funding, which in turn have led to decreased agency staff to enforce existing laws, rules and regulations. Finally, funds available for agencies to maintain and operate existing facilities are limited and there is much competition for scarce funds. The need for protection and sustainability of natural and cultural landscapes and our capability to be stewards of those resources must be considered when agencies and communities plan for and manage the location and scope of many outdoor recreation activities and motorized and nonmotorized trail networks.

- **Communicate with and Educate the Public**

One of the biggest concerns for outdoor recreation providers is how to provide easily accessible information and awareness about recreation areas, access points and opportunities. As technological changes and advancement occur, the tools that can be used to communicate with the recreating public have increased, challenging agencies and organizations to develop expertise, and policies in the use of these new methods of communication. Also, these tools may allow communication between organizations or agencies and the public to become more of a dialogue, as opposed to agencies communicating information unidirectionally to the public. These tools may ultimately serve to make input from the recreating public more immediate and public prior to any final land use decisions. One of the biggest challenges for land managers is to find creative ways to inform the public about Arizona's unique environments, its recreational opportunities, how to safely and responsibly enjoy public lands, and to productively involve them in management decisions and actions. However, agencies must be aware that multiple communication strategies are necessary to make sure that this information reaches as many potential recreationists as possible.

ARIZONA'S OPEN PROJECT SELECTION PROCESS

The information presented in Chapter 7 details the Open Project Selection Process used to make funding decisions for federal Land and Water Conservation Fund (LWCF) grant programs administered by Arizona State Parks. Information includes program information, a program time schedule, guidelines used for the LWCF program and the rating points given for each of the criteria.

The guidelines for the LWCF programs are based on the results of the SCORP planning process and public input.

The Arizona State Parks Board adopted a new vision for the agency in 2009. While the agency's mission emphasizes the management of not only the state's *recreational* resources but also its *natural and cultural resources*, it also focuses on benefits of these resources and open spaces to the communities of Arizona, as well as to the state itself. The ASPB directed staff to implement this vision throughout its parks and programs, including the numerous grant programs administered by the agency.

Vision: *Arizona State Parks is indispensable to the economies, communities, and environments of Arizona.*

The grant rating criteria for the LWCF programs reflect this new vision as well as the priority issues identified in the 2013 SCORP.

LWCF GRANT RATING CRITERIA SUMMARY	Points
I. Long-Range Planning	23
II. Project Need (Project Specific Planning/Public Involvement)	35
III. Conservation of Resources	20
a) Implementation of conservation actions, or b) Protection of existing resources	
IV. Leveraging Funds through Donations	8
V. Project Sustainability	10
VI. Past Grant Administrative Compliance	4
a) Post-Completion Compliance b) Workshop Attendance	
TOTAL POINTS POSSIBLE	100

This 2013 update of Arizona's Statewide Comprehensive Outdoor Recreation Plan (SCORP) serves as the State's outdoor recreation policy plan. It is intended to guide outdoor recreation managers and decision-makers on policy and funding issues. The plan provides decision-makers and outdoor recreation managers a thoughtful analysis of the most significant outdoor recreation issues facing Arizona today and suggests strategies to address these issues during the next five years.

CHAPTER OVERVIEW

Chapter 1 describes the LWCF and SCORP background information and provides details about Arizona State Parks' grant programs.

Chapter 2 reports the planning process used for the 2013 SCORP update. This process included a 17-member steering committee of recreation and natural resource professionals representing a wide range of backgrounds, an online survey of Recreation Providers and an online survey of Involved Recreation Users, trends research and public review and participation.

Chapter 3 highlights the importance of parks and outdoor recreation including benefits to people's physical and mental health, to the local economy, to the environment, and to a community's social structure.

Chapter 4 provides a picture of current national outdoor recreation situation and the trends that influence and shape recreation participation, programs and facilities. This chapter also summarizes several other Arizona outdoor recreation-related reports regarding tourism, trails, boating, hunting and fishing, wetlands and historic preservation.

Chapter 5 details the findings of two SCORP surveys. The survey results lay the foundation for the 2013 SCORP and its priority issues, and Provider Survey results guide the development of the rating criteria for the LWCF grant programs. The Involved User Survey informs land managers of the their constituents' perception of changes in outdoor recreation during the last five years, and their priorities and opinions in regards to outdoor recreation issues in Arizona.

Chapter 6 details the two tiers of priority outdoor recreation issues identified for Arizona through the SCORP planning process and lists the goals and strategic actions to address each issue.

Chapter 7 outlines the grant rating criteria, called the Open Project Selection Process, and the timeline and process for submitting and receiving a grant. The rating criteria incorporate many of the priority issues.

WHAT INVOLVED RECREATION USERS HAD TO SAY ABOUT OUTDOOR RECREATION

To gather current information on outdoor recreation participation, trends and issues, Arizona State Parks in collaboration with a guiding group of 17 outdoor recreation professionals conducted two surveys in 2012. The first was an online survey targeting Outdoor Recreation Providers and land managers. The second was an online survey targeting Involved Recreation Users of Arizona recreation areas. Participants in the Involved Recreation User survey were recruited using the following methods: an email invitation to participate in the Recreation User survey was sent to the SCORP Working Group members, to colleagues of Arizona State Parks staff and to the list of recreation providers who were asked to participate in the Providers Survey. They were asked to

include this information in their email newsletters, or list serves. Organizations such as Arizona Office of Tourism and Arizona Game & Fish included the information in their email newsletters. In addition, a press release was made available and picked up by media in various parts of the state. In addition, bookmarks with SCORP information were distributed to SCORP Working group to put out at recreation or visitors centers. A limited amount of the bookmarks were also distributed at both public and private partner facilities in the Phoenix metro area (e.g., REI, libraries, Boy Scouts/Girl Scouts, etc.). Finally, information about the SCORP was posted to Arizona State Parks webpage, and partners, providers and SCORP Working Group members were encouraged to do the same. Thus the sample represents the feedback of a group who have visited outdoor recreation sites recently, are signed up for information from public land managing agencies or are likely to get outdoor recreation information via newspaper or online. The answers from Involved Recreation Users are listed for the whole sample, then those that reported engaging in selected activities once a week or more were identified as frequent users, and were examined separately to provide more information on intensive visitors. The information reported below is from the Involved Recreation User survey.

Interest in Outdoor Recreation

To begin the Involved Recreation User survey, people were asked how interested they were in outdoor recreation activities.

- Less than one percent (.2%) said they were not interested at all,
- 79% said they were very interested,
- the mean level of interest of public respondents statewide was 4.83 (on a 1 to 5 scale).

This is not surprising since the target population for this survey was constituents of outdoor recreation agencies, who had either attended programs or signed up for email newsletters or updates.

Importance of Recreation Settings

When asked the importance of different recreation settings (on a scale of 1 *Not important* to 5 *Extremely important*), Involved Recreation Users overall ranked *open spaces in a natural setting* (4.59) very high, followed by *large nature-oriented parks* (4.19). Generally, selected high frequency user groups ranked recreation settings similarly in terms of rank order, however there were some variations in mean ratings between groups.

Funding Priorities

Another important aspect of recreation planning is funding. Involved Recreation Users were asked how their local parks and recreation departments should spend the limited funds they receive. While five of the funding categories ranked very high, *maintaining existing outdoor facilities* was definitely the highest rated priority, nearly three out of ten (59%) Involved Users rated it extremely important. The second most important funding priorities were *protecting natural and cultural resources (both those open to the public and those that aren't)*, and *providing habitat and ecosystem preservation and restoration*,

which both received the same mean rating. The third priority for involved recreation users was *maintaining existing levels of recreation and cultural education programs*, followed by *acquiring land for open space and natural areas*.

Outdoor Recreation Issues

Understanding the public and Involved Users perceptions of recreation issues is an area of concern for recreation planners and providers. In the Involved User survey, respondents were asked how strongly they agreed or disagreed with nine statements about outdoor recreation and related issues including user conflicts and access.

The top two rated statements show conflicting perspectives from Involved Users regarding current recreation issues. The statement with the highest mean (out of 5) agreement is *The parks and recreation areas in my community are generally well-maintained* (3.57) followed closely by *Recent budget cuts to parks and recreation providers have had a negative impact on outdoor recreation experiences in my area* (3.51). Since users perceive a negative impact on their recreation experience due to budget cuts, it is assumed from their responses that the negative impact is not due to maintenance of the parks. Future research would be valuable to understand in greater depth specifically how budget cuts have negatively impacted the experience. The results also show that Involved Users are satisfied with the access to and amount of parks in their communities. Both these issued scored positive agreement ratings: *Access to the public outdoor recreation lands in my area is adequate* (3.20) and *I am satisfied with the number of parks, open spaces, natural areas and playgrounds in my community* (3.18).

Benefits of Parks and Outdoor Recreation

The perceived benefits of recreation can be linked directly to the “**quality of life**” of individuals within a larger community.

Respondents statewide rated the top two benefits almost equally, *provide opportunities for family interaction* (86.8% agree/strongly agree) and *promote a healthy lifestyle through physical activity* (87.2% agree/strongly agree). In the number three spot, 83.3% agreed or strongly agreed that recreation and cultural areas, parks and open spaces *provide constructive opportunities for youth* and 80.9% agreed or strongly agreed that these areas *protect natural and cultural resources*. There is not one single item included in this list of sixteen recreation benefits that scored lower than a mean value of 3.5 indicating that recreation benefits are important to this group.

Participation in Outdoor Recreation Activities

This survey asked respondents to rate how often they currently participate in four broad categories of outdoor recreation, each broken down into individual activities. In addition, they were asked if they will participate more, less, or the same in these activities over the next five years. However, it is important to remember that the sample of Involved Recreation Users is a small sample of overall recreation users in Arizona. This must be taken into account when reviewing the information in this report. Chapter 5 provides

interesting aspects of recreation participation information by high frequency users of a group of selected activities.

The 3 visiting or learning activities that the largest percentage of Involved Users participated in were:

- Visiting a natural or wilderness area
- Recreational motorized driving in maintained roads
- Wildlife watching or nature photography

The 5 land-based activities that the largest percentage of Involved Users participated in were:

- Day hiking
- Walking, jogging or running on trails or at a park
- Tent camping

The 3 water-based activities that the largest percentage of Involved Users participated in were:

- Fishing
- Swimming in a lake or stream
- Motorized boating

The most common snow-based activity that the largest percentage of Involved Users participated in was snow play or sledding.

Several of the activities show at least some level of participation by 75% or greater of the majority of Involved Users, such as hiking, picnicking, visiting a historical or cultural area, a local park or a natural or wilderness area, and recreational driving on maintained roads. Some of the activities show at least some level of participation by half (50%) of Involved Recreation Users, such as bird watching, taking guided tours of cultural or recreational sites, hunting, RV and tent camping. However, other activities in this list are participated in by less than half of all Involved Recreation Users, and some by less than 20%.

Chapter 1

INTRODUCTION

This 2013 update of Arizona's Statewide Comprehensive Outdoor Recreation Plan (SCORP) is intended to guide outdoor recreation managers and decision-makers on policy and funding issues. While local, state and federal agencies have their own detailed management plans that are used to guide the development and operation of outdoor recreation facilities and management of land and water resources, the SCORP is a mechanism by which the state's recreational resources and management issues can be viewed collectively. It provides decision-makers and outdoor recreation managers with a thoughtful analysis of the most significant outdoor recreation issues facing Arizona today and suggests strategies to address these issues during the next five years.

LAND AND WATER CONSERVATION FUND

Background and Legal Authority

In 1964, Congress passed the Land and Water Conservation Fund (LWCF) Act (P.L.85-578) creating a program to assist state and local governments in acquiring, developing and expanding high quality outdoor recreation areas and facilities. Using revenues from offshore oil and gas receipts, the Act's intent is to provide funds for the acquisition and development of public lands to meet the needs of all Americans for outdoor recreation and open space. The Act stipulates that each state is required to complete an approved outdoor recreation plan or "SCORP" to be eligible for LWCF stateside allocations. Since its inception, the Fund has successfully conserved several million acres of recreation land and open space and helped create more than 40,000 state and local park recreation facilities.

LWCF Funding

To ensure an integrated approach to conservation and recreation, LWCF has two components:

- A federal program that funds the purchase of federal agency land and water areas for conservation and recreation purposes. Congress appropriates these funds directly to federal agencies on an annual basis.
- A stateside matching grants program that provides funds for natural resource conservation to states for planning, developing and acquiring land and water areas for state and local parks, recreation areas and open space.

The President has committed to fully fund the LWCF - \$900 million – by 2014. However, since its inception Congress has chosen to allocate a significant portion of the fund for purposes other than conservation and recreation. For a period of four years starting in 1996, no stateside LWCF funds were allocated at all. In 2000, Congress

resumed funding. In 2011, The President released the America's Great Outdoors: A Promise to Future Generations (AGO) report that begins to implement a far reaching 21st century conservation and outdoor recreation agenda. The report reflects the input of citizens from across the country, from all ethnic and age groups, political parties and thousands of young people. As a result of the AGO initiative, the President's FY 2012 Budget Request proposed a five-fold increase for State LWCF grants to \$200 million. The first 40 percent of \$78 million was apportioned equally according to the LWCF stateside formula for State and local outdoor recreation projects, resulting in a significant increase in 2011. The remaining 60 percent or \$117 million was used for a nationally competitive grant program focused on supporting the AGO priorities of enhancing urban parks and community green spaces, developing blueways and public access to water resources, and conserving large landscapes.

Arizona has grown in recent years and so has the need for outdoor recreation resources. The National Park Service reported the average annual need for recreational facilities development in Arizona over the last three fiscal years was \$128,566,667. One of the primary reasons for the size of this need has been the lack of equity in the distribution of the LWCF to the states which led to reduced State Assistance appropriations. In FY 2010 the LWCF distribution to Arizona was \$729,417 which barely funded smaller local needs for projects and met only 0.6% of the total need.

Arizona's goal for "America's Great Outdoors" is to create and sustain healthy landscapes and livable communities to connect people to the incredible resources through integration of quality of life with quality growth in our everyday lives and expectations for future growth and development. Arizona continues to support local and statewide planning processes to help in the development of outdoor recreation and open spaces to create a part of "America's Great Outdoors."

Arizona receives congressional appropriations from LWCF, administered through the Arizona State Parks Board (ASPB), for the state and local government sponsored recreation projects. Arizona's stateside LWCF share is based on a formula comprised of land area and population factors. The ASPB has the authority to establish procedures and requirements for all LWCF grant applications. These are 50:50 matching grants available to municipalities, counties, state agencies and tribal governments. Areas funded through LWCF grants must be operated and maintained in perpetuity for public outdoor recreation use. The primary intent is to increase high quality recreational opportunities for citizens and visitors to the State of Arizona in cooperation with local political subdivisions and state agencies.

Arizona's LWCF Allocations

Arizona has been an active participant in the LWCF program since the inception of the program in 1965. Since then, more than 718 LWCF grants were awarded totaling \$57.9 million, with a leveraged amount of over \$120 million, making a significant contribution to investments in Arizona's outdoors (see Appendix). The highest amount received by the state was in 1979, with a grant allocation for Arizona that year that totaled \$4.8 million out of \$369 million national appropriation. In 2005, Arizona's stateside LWCF

share was about \$1.7 million, out of a total of about \$88 million appropriated by Congress. In 2006 and 2007, Arizona's stateside LWCF share was only \$535,156 each year, out of a total of \$27.9 million appropriated by Congress for each year. In 2008, Arizona's stateside LWCF share decreased even more to \$441,526, out of a total of \$23.1 million appropriated by Congress, but increased in 2009 to \$518,919, out of a total of \$27.1 million appropriation by Congress. In 2010 the total apportionment to the "states" was \$37,200,000 of which Arizona's share was \$729,417. The 2011 the apportionment to the "states" was at approximately the same level at \$37,405,594 of which Arizona's share was \$744,061. The 2012 apportionment to the "states" was \$42,239,997 and Arizona's share was \$840,738.

Table 1. LWCF Annual Apportionments to Arizona 1965 through 2012

1965	\$131,045	1981	\$2,745,899	1997	\$0
1966	\$1,052,875	1982	\$0	1998	\$0
1967	\$721,398	1983	\$1,654,921	1999	\$0
1968	\$793,178	1984	\$1,090,888	2000	\$696,484
1969	\$582,626	1985	\$1,116,080	2001	\$1,637,450
1970	\$801,114	1986	\$700,462	2002	\$2,637,236
1971	\$1,974,293	1987	\$498,035	2003	\$1,160,604
1972	\$3,297,150	1988	\$252,511	2004	\$1,755,514
1973	\$2,337,039	1989	\$262,074	2005	\$1,724,232
1974	\$1,710,327	1990	\$245,865	2006	\$535,156
1975	\$2,313,900	1991	\$482,420	2007	\$535,156
1976	\$2,825,529	1992	\$306,529	2008	\$441,526
1977	\$2,369,539	1993	\$386,029	2009	\$518,919
1978	\$4,026,227	1994	\$416,812	2010	\$729,417
1979	\$4,859,702	1995	\$418,852	2011	\$744,061
1980	\$4,859,702	1996	\$0	2012	\$840,738
				Total	\$59,189,514

Local, Regional and State Parks Heritage Fund

In addition to the LWCF, Arizona's recreation lands benefited in the past from the Local, Regional and State Parks (LRSP) Grant Program which received revenues from the Arizona Heritage Fund (from a percentage of state lottery revenues; A.R.S. § 41-503; § 5-522). On March 18, 2010 Governor Brewer approved 2010-2011 House Bill 2012/Senate Bill 1012 – Chapter 12 (Seventh Special Session) which transferred, retroactive to February 1, 2010, any State Lottery monies allocated to the State Parks Board Heritage Fund for FY10 to the General Fund and permanently repealed the \$10 million annual State Parks Board Heritage Fund portion of the State Lottery distributions.

The LWCF grant evaluation criteria (Open Project Selection Process) and application process was used to award LRSP/LWCF grants since both programs funded the same types of parks and recreation acquisition and development projects. From 1991 through 2008, the ASPB awarded 282 LRSP projects totaling nearly \$61 million, with a leveraged amount of \$134 million.

STATEWIDE COMPREHENSIVE OUTDOOR RECREATION PLAN

Background

Arizona is mandated by Section 6(d) of the LWCF Act of 1965 to create the SCORP planning document every five years. Once approved by the National Park Service, the updated SCORP maintains Arizona's eligibility to participate in the LWCF stateside program. Each State's SCORP guides how annual stateside LWCF apportionments are granted to eligible recipients for outdoor recreation acquisition and development projects. The SCORP must address statewide outdoor recreation issues including recreation supply and demand, a sufficiently detailed strategy for obligation of LWCF monies (Open Project Selection Process), identify wetlands that need priority protection, and provide ample opportunity for public involvement.

While the SCORP is a compilation of information on outdoor recreation in Arizona and will assist in the decision making needs of a variety of providers, it is not a site specific plan nor does it attempt to address or solve every issue facing Arizona's recreation delivery system. The SCORP identifies existing resources and systems, general outdoor recreation and related tourism participation patterns and trends, issues and problems, and provides recommendations for strategic solutions to those problems. Local and regional planning, research and cooperation are strongly encouraged to complement the information contained in the SCORP in order to satisfy the outdoor recreation needs of Arizona.

Purpose of SCORP

Federal guidelines outline two general purposes of the SCORP:

1. Guide the use of LWCF funds for local government and state recreation agencies by identifying public and agency preferences and priorities for outdoor recreation activities and facilities.
2. Identify outdoor recreation issues of statewide importance and those issues that will be addressed through LWCF funding.

When a local community identifies a priority in common with Arizona's SCORP, there may be an opportunity to apply to the ASPB for a grant from the Federal Land and Water Conservation Fund. Projects that directly address the SCORP's Open Project Selection Process priorities are more likely to receive funding.

Engaging in the SCORP process presents an ideal opportunity to focus public attention on outdoor recreation's key role in Arizona's economy and quality of life. The 2013 SCORP is an update to the information in the comprehensive 2008 SCORP.

ARIZONA STATE PARKS' ADMINISTERED GRANT PROGRAMS

The ASPB administers several state and federal grant programs that provide funds to eligible entities for outdoor recreation, nonmotorized trails, off-highway vehicle recreation, boating lake improvements, open space, and historic preservation projects.

The following grant programs are specifically for outdoor recreation purposes: the federal Land and Water Conservation Fund (LWCF) for park development and land acquisition, the federal Recreational Trails Program (RTP Nonmotorized) for trail maintenance projects, the federal Recreational Trails Program (RTP Motorized) for motorized trail development, the State Off-Highway Vehicle Recreation Fund (OHV) for motorized trail development and information,

ASPB also administers the Arizona Land Conservation Fund providing matching grants for acquisition of select State Trust lands for conservation and open space purposes, and the Federal Historic Preservation Fund providing grants to local and state owners of historic properties for stabilization and restoration projects.

ASPB awards grants and partnerships from these funds to agencies and organizations to accomplish mutual goals regarding the development, restoration, protection and enhancement of Arizona's natural, cultural and recreational resources.

NOTE: Eligible applicants vary by program, not all entities are eligible to apply for funds from all programs. Some programs have requirements of matching funds and maximum caps on the amount of funds available to an entity in any one funding cycle.

Awarded Grants and Funded Partnerships from FY 2002 through FY 2011

The 2008 SCORP tracked grant expenditures from fiscal years 2002 through 2006. This 2013 SCORP will track grant expenditures from fiscal years 2007 through 2011. From fiscal years 2007 through 2011, the ASPB awarded over \$217 million in grants and partnership projects (Tables 2, 3 and 4).

Land and Water Conservation Fund

The LWCF has provided approximately \$1.5 million in grants to fund seven park and recreation projects in Arizona from FYs 2007-2011. Included in this amount is the 30% ASPB receives for outdoor recreation projects located within State Parks' managed lands.

Arizona Heritage Fund

On March 18, 2010 Governor Brewer approved 2010-2011 House Bill 2012/Senate Bill 1012 – Chapter 12 (Seventh Special Session) which transferred, retroactive to February 1, 2010, any State Lottery monies allocated to the State Parks Board Heritage Fund for FY10 to the General Fund and permanently repealed the \$10 million annual State Parks Board Heritage Fund portion of the State Lottery distributions.

The ASPB awarded over \$7 million of the Heritage Fund to fifty-eight competitive grant projects from FY 2007 through FY 2008, including \$3.2 million to sixteen local park projects (LRSP), over \$1 million to thirteen trail projects and \$2.6 million to twenty-nine historic preservation projects.

The State Historic Preservation Office also awards monies from the federal Historic Preservation Fund to private landowners and Certified Local Governments to plan for and protect local cultural resources (Table 4).

Off-Highway Vehicle Recreation Fund

The State Off-Highway Vehicle (OHV) Recreation Fund, established in 1991, provides a legislatively set percentage (0.55%) of the total license taxes on motor vehicle fuel from the Highway User Revenue Fund for OHV management. Beginning in January, 2009 changes to SB 1167 require certain off-highway vehicle users to purchase an indicia (OHV Decal/Sticker). New monies from the OHV Decal contribute to the OHV Recreation Fund. The Board uses 60% of the money in the fund grants to meet the needs of land managers and recreational OHV users. A new program was developed to simplify the process of getting money to the land managers through existing cooperative agreements. The “Sticker Fund Project Selection Program” was announced in February 2010 and in June 2010 fourteen projects were awarded funding totaling \$591,489. Funds are awarded periodically throughout the year.

The Bureau of Land Management is also awarded funding to continue coordination and expansion of the Arizona OHV Ambassador Program. The OHV Ambassador Program represents a group of trained volunteers from the OHV community who are motivated to enhance OHV recreation opportunities in Arizona. OHV Ambassadors play a critical role in assisting land managers’ efforts to provide a recognizable presence on the lands they enjoy while providing a positive and informative role model for fellow OHV users. The program is a collaborative partnership between resource management agencies, OHV clubs, public safety entities, individuals, and other OHV stakeholders. Governing partnerships provide leadership, proper training, educational materials, and supplies.

In addition, since FY 2005 up to \$692,100 has been appropriated annually from the OHV Recreation Fund by the Legislature to fund General Fund deficits in ASPB’s park operating expenses.

Recreational Trails Program

The Federal Recreational Trails Program (RTP) is part of the Federal Highway Administration’s Transportation Equity Act for the 21st Century (TEA-21 covers FFYs 1998-2004) and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU covers FFYs 2005-2009). The RTP is a Federal-aid assistance program to help the States provide and maintain recreational trails for both motorized and nonmotorized recreational trail use.

Arizona splits RTP trail projects monies evenly (50:50) between motorized and nonmotorized trail projects. Motorized trail monies fund competitive grants to eligible entities for a wide range of off-highway vehicle recreation projects. Nonmotorized trail monies specifically fund trail maintenance partnerships throughout the state. In FYs 2007-2011, the RTP has provided \$3.3 million to twenty agency projects to improve trail opportunities in the state.

State Lake Improvement Fund

The State Lake Improvement Fund (SLIF) consists of a portion of the motor vehicle fuel taxes and a portion of the watercraft license tax. The exact percentage is based on the findings from a survey of registered boat owners conducted every three years. SLIF is used to fund boating lake improvements, purchase watercraft for managing agencies, and

occasionally construct new lakes. Since 2006, SLIF revenues can only be used on waterways where gas-powered boats are permitted. In 2002, the State Legislature swept \$6 million from the fund to address General Fund revenue shortfalls; in 2003 \$10 million and in 2004 \$6.8 million was swept from the fund. Due to these fund sweeps, SLIF has provided only \$7.4 million in competitive grants to thirty-one boating improvement projects on Arizona's lakes and waterways from FYs 2002-2006, and an additional \$600,000 to Arizona State Parks' boating improvement projects. In 2007, \$6.1 million was awarded to thirteen SLIF projects. For the 2008 SLIF grant cycle, there were a total of twelve grant applications approved for funding totaling approximately \$6.5 million. However in May 2008, due to a state budget shortfall, the legislature "swept" approximately \$4.1 million in SLIF funding for fiscal year 2008. As a result of the sweep, the Arizona State Parks Board decided to cancel the SLIF awards for fiscal year 2008. The SLIF grant program currently remains suspended.

Land Conservation Fund

The purpose of the Land Conservation Fund is to conserve open spaces in or near urban areas and other areas experiencing high growth pressures. This is accomplished by awarding grants for the purchase or lease of State Trust land that has been classified as suitable for conservation purposed by the Arizona State Land Department (ASLD).

In 1998 the voters passed Proposition 303, which established an annual \$20 million appropriation by the Arizona State Legislature from the General Fund to the Land Conservation Fund (A.R.S.§41-511.23). The annual appropriation began in FY 2001 and continued through FY 2011.

From 2001 thru 2011 The Growing Smarter Land Acquisition Program received \$18 million annually from the \$20 million appropriated by the State Legislature annually to the Land Conservation Fund for matching grants to purchase select State Trust lands for open space and conservation purposes. Applicants must first work with the State Land Department to get the land classified as conservation lands. This program has provided \$173.1 million to twenty-one open space land acquisition projects in FYs 2001-2011.

A total of \$40.7 million still remains available for state trust land acquisition grant projects after 2011.

Arizona Trail Fund

The newest state grant program, the Arizona Trail Fund, was established in 2006 to fund development of the long-distance Arizona Trail. The State Legislature appropriated a total of \$500,000 to the fund in FY's 2007 through 2009. Arizona State Parks worked closely with the Arizona Trail Association and other agencies that manage the Arizona Trail to fund needed projects. It is not known if the State Legislature will appropriate any monies to this fund in subsequent years.

Table 2. Arizona State Parks Awarded Competitive Grants from FY 2007-FY 2011

Grant Program	Number of Grants Awarded	Grant Dollars Awarded
Land and Water Conservation Fund (LWCF)	7	\$1,509,125
Arizona Heritage Fund (state AHF-3 grant components)		
- Parks (LRSP)	17	\$6,893,508
- Trails (nonmotorized)	14	\$1,179,173
- Historic Preservation	21	\$1,959,744
Recreational Trails Program-RTP Motorized	20	\$3,317,394
State Lake Improvement Fund (SLIF)	13	\$6,104,386
Law Enforcement and Boating Safety Fund (LEBSF)	26	\$6,961,910
Growing Smarter/Land Conservation Fund	14	\$185,103,855
Off-Highway Vehicle Recreation Fund (OHV)	35	\$2,022,744
Totals	171	\$217,275,318

Individual project lists for each competitive grant program are listed by grant recipient on the Arizona State Parks webpage (www.AZStateParks.com).

Arizona State Parks also partners with other governments and organizations to accomplish various program goals using portions of funds through cooperative agreements. Table 3 details out those funds and amounts expended in the past five years.

Table 3. Arizona State Parks Funded Partnerships from FY 2007-FY 2011

Program	Number of Projects	Project Dollars Allocated
Federal Historic Preservation Fund (HPF)	77	\$471,459
Off-Highway Vehicle Recreation Fund (FY 2010)	1	\$25,000
Recreational Trails Program- RTP Nonmotorized	{To Come}	{To Come}
Arizona Trail Fund (FY 2009 & 2010)	28	\$500,000
Totals		\$XXXX

The following three tables summarize grant information from FY 2007 through FY 2011 for some of the outdoor recreation grant programs administered by ASPB. Table 4 compares the number of projects requesting funding versus the actual number that were awarded grants (supply versus demand).

Table 4. Outdoor Recreation Grant Programs from FY 2007 through FY 2012

Totals by Grant Program	# of Projects Requested	# of Projects Funded	Dollars Requested	Dollars Awarded*
LRSP/LWCF	60	25	\$25.3 Million	\$8.4 Million
Trails Heritage	14	14	\$1.2 Million	\$1.8 Million
RTP Non-motorized	53	53	\$2.3 Million	\$2.3 Million
RTP Motorized/OHV	54	54	\$5.3 Million	\$5.3 Million
SLIF	25	13	\$12.5 Million	\$6.1 Million
Totals	119	71	\$46.6 Million	\$23.9 Million

Table 5 compares **urban versus rural** towns and counties requesting and receiving LRSP and LWCF funds.

Table 5. Breakdown of LWCF and LRSP Totals by Applicant Type FY2007-FY2012

LRSP/LWCF For Municipal Totals only	# of Projects Requested	# of Projects Funded	Dollars Requested	Dollars Awarded
County	10	2	\$2,999,083	\$852,172
Urban (towns>100,000=62% of AZ pop.)	11	5	\$5,895,606	\$1,245,091
Rural (towns<100,000=38% of AZ pop.)	29	10	\$12,078,031	\$3,715,290
Tribe	6	4	\$2,004,139	\$1,764,632
State	3	3	\$825,448	\$825,448

Table 6 compares the percentage of grant dollars awarded **by applicant type**: municipalities, state, Tribal, federal and nonprofit (most programs do not include nonprofits as eligible entities).

Table 6. Percent of Grant Dollars Awarded by Applicant Type FY2007-2012

% of Dollars *	Municipalities	State	Tribal	Federal	Nonprofit
LRSP/LWCF	69%	10%	21%	0%	0%
Trails Heritage	65%	0%	35%	0%	0%
RTP Nonmotorized	22%	6%	0%	71%	0%
RTP Motorized/OHV	17%	5%	0%	76%	2%
SLIF	100%	0%	0%	0%	0%
Total %	83%	6.5%	0.5%	9.5%	0.9%

Chapter 2

PLANNING PROCESS

The process used to develop Arizona's 2013 SCORP included an advisory committee, web-based surveys, trend research, and public review and comment on the draft plan.

Arizona 2013 SCORP Work Group

The SCORP was developed under the guidance of a 17-member Work Group of outdoor recreation and natural resource leaders from local, state and federal agencies and private organizations. Participants were selected to represent a broad spectrum of outdoor recreation and natural resource perspectives.

The Work Group met two times between March 2012 and July, 2012, and continued to communicate via email to identify, discuss and prioritize statewide outdoor recreation issues. They reviewed, edited and recommended questions for the recreation provider and Involved Recreation User surveys, and engaged in discussions and provided feedback on analysis of the data collected from both Recreation Providers and Involved Recreation Users. The group suggested revisions to the Open Project Selection Process (OPSP or grant rating criteria) for the LWCF State Park grant program. They also helped guide the preparation.

Table 7. 2013 SCORP Work Group

2013 SCORP Work Group	
Rafael Payan	Director, Pima County Natural Resources, Parks and Recreation
R.J. Cardin	Director, Maricopa County Parks and Recreation Department
Leigh Johnson	Park Planner, Maricopa County Parks and Recreation Department
Don Applegate	AZ Recreation Program Lead, Bureau of Land Management State Office
Shawn Blackburn	Director, Mohave County Parks
Cathy Wise	Education Director, Audubon Arizona
Cate Bradley	Landscape Architect, Rivers, Trails and Conservation Assistance, National Park Service
Lee Eseman	Acting Chief of Operations, Arizona State Parks
Jody Latimer	Manager, Environmental Resources and Trespass, AZ State Land Department
Mary Dahl	Santa Cruz County Department of Parks, Open Space and Cultural Services
John Vuolo	Director of Parks and Recreation, Town of Pinetop-Lakeside
Sharon Wallace	Public Services Group Leader, Tonto National Forest
Alex Wisniewski	Maintenance Manager, Coconino County Parks and Recreation
Jimmy Simmons	OHV Law Enforcement Program Manager, AZ Game & Fish Dept.
Melissa Elkins	Research Manager, AZ Office of Tourism
Dawn Melvin	Tribal Tourism Relations Manager, AZ Office of Tourism
Bill Schwind	Director, Casa Grande Parks and Recreation Department

The Purpose and Scope of the 2013 SCORP

In recent years much attention has been given to the role and relevancy of the SCORP with agencies and planners across the nation. This culminated in the National Association of Recreation and Resource Planners (NARRP) 2011 document Reframing the Role and Relevancy of Statewide Outdoor Recreation Plans. NARRP states in the report that the guidance, projects, and activities typical of a SCORP have a longer shelf-

life and require more time to implement than five years. States would also benefit from a shift in time and dollars from planning to implementation of programs and projects. Conversely, NARRP believes that States and their collaborating planning partners would benefit from a more rigorous planning effort every ten years. These recommendations fall in line with Arizona current planning schedule and available resources. The 2008 Arizona SCORP was a comprehensive, intra-agency collaboration based effort. The 2013 SCORP will serve as an update to the 2008 SCORP and focus on any key changes or status of the established priorities.

The goal of this process was to document changes in the provision of outdoor recreation within the last 5 years and to propose strategies for moving forward given the “new reality” agencies find themselves in as a consequence of the recent economic recession. This SCORP attempts to provide answers to the questions:

- What has happened to outdoor recreation opportunities – both from the perspective of Outdoor Recreation Providers and Involved Recreation Users?
- What does this mean for the future of outdoor recreation agencies and opportunities?
- How should recreation providers move forward as they redefine their core missions to adjust to current conditions?

Recreation Provider and Public Surveys

In order to address the questions above, the 2013 SCORP update once again employed a Recreation Providers survey, which asked comparable questions as in 2008 for comparable and longitudinal data highlighting changes. In addition, in order to fulfill the requirement for public participation, a non-probability sample of Involved Recreation Users was collected, including both Arizona residents, and a small sample of non-residents. In order to assess changes that have occurred since 2008, this group was targeted because they are involved, engaged and more likely to have experienced changes in outdoor recreation provision. Additionally, because the issue of outdoor recreation is salient to this group, they would be more likely to take the time to report on their experiences.

An online survey was utilized for both Providers and Involved Recreation Users. The use of an internet survey for Recreation Providers was a replication of the method used in the 2008 SCORP. An internet survey was also utilized to encourage public participation in the SCORP process. Nationally, 85% of adults have access to the internet, either at work or at home (Pew, 2012), and as of October, 2009, 74% of Arizona residents over the age of 3 had access to the internet (US Census Bureau, 2010). As internet access becomes increasingly available, issues of non-representativeness of internet survey samples will decrease. In addition, as the representativeness of telephone surveys is challenged by cell phone use, caller identification and higher non-response rates, researchers may increasingly turn to internet surveys, especially as part of a mixed method approach in order to address some of these shortcomings (Berrens, Bohara, Jenkins-Smith, Silva & Weimer, 2003) .

Researchers have stated that advantages of surveys conducted over the internet are: 1) increased cost efficiency, which allows for the collection of larger samples in relatively short periods of time; 2) a reduction in the impact of interviewer bias; 3) continual improvement in the availability of technology resulting in increasingly representative samples of the population over time; and 4) decreased cost of staff time to administer surveys (Berrens, et al., 2003). Tummons and Marshall, in collaboration with the Tennessee Recreation Advisory Committee (2009) used internet surveys for plan development and stated, “The online survey format succeeded in engaging a far larger number of participants and a far more diverse range of public comments than any previous state recreation planning process in Tennessee. Such surveys show significant promise for increasing the degree of public involvement in the future” (Tummons & Marshall, 2009, p.117). Others found, in a study comparing mixed modes of data collection, those that those filled out via email resulted in more completed and returned questionnaires, less item nonresponse and more comprehensive responses to open-ended questions than methods utilizing paper questionnaires (Shaefer & Dillman, 1998). In addition, surveys were completed more quickly via email than in other methods tested (Shaefer & Dillman, 1998). However, weaknesses of this data collection method must also be noted. Those who do not currently have internet access are likely to differ in systematic ways from those who do (e.g., more elderly, lower socioeconomic status, less educated, less minorities, etc) (deLeeuw, 2005). Therefore it is still not possible to draw a representative sample from the population using internet surveys and this must be taken into account when reviewing the data from the Involved Recreation Users.

The Provider web-based survey was available to over 365 of Arizona’s outdoor recreation providers, including local, state, tribal and federal agencies and local land trusts. It was conducted from May 1 through May 31, 2012. An initial email invitation to participate in the survey, which included instructions for accessing the online survey, was sent to all SCORP Working Group members to distribute within their agencies and organizations. This invitation was also sent to a list of past grant recipients and other recreation providers identified by Arizona State Parks staff and reviewed and supplemented by the SCORP Working Group. In addition, several follow-up email reminders including the survey link were sent to encourage participation. Arizona State Parks received 125 surveys, 95 of which were completed resulting in a response rate of 26%. Since the response rate does not take into account the number of individuals who received the survey link from another recipient or colleague, the response rate reported above must be considered an estimate, whereas the actual response rate is likely lower. This survey was conducted to determine, from the resource managers’ perspective, the current outdoor recreation opportunities, issues, concerns and priorities.

The second survey was an online survey of Involved Recreation Users of Arizona’s cultural and recreational sites (2,449 completed interviews). For the first time, this survey includes recreationists from both in-state and a small sample of out-of-state visitors. The survey was also available starting May 1 through May 31, 2012. This survey included questions pertaining to the importance of different types of parks, frequency of participation in outdoor recreation activities, use of technology while recreating, and opinions about outdoor recreation issues. Some of the questions regarding funding,

conflict of recreation users, etc. were only asked of Arizona residents, whereas recreation participation was asked of all recreationists regardless of residence location. See Chapter 5 for survey results.

In addition, ASU assisted the State Historic Preservation Office in conducting a statewide public survey in 2006 on historic preservation issues for the update to the Arizona Historic Preservation Plan, which was completed in 2008.

Draft and Final Plans

Before beginning the plan, staff presented the planning process to the Arizona Outdoor Recreation Coordinating Commission (AORCC) and the Arizona State Parks Board (ASPB) at public meetings. The Work Group met to discuss and guide the plan. Regular updates were scheduled to be provided to AORCC throughout the process and public input on the draft plan will be sought online.

A draft plan will be approved by AORCC at a public meeting in September and the plan will then be available for public comment from September 7, 2012 through October 7, 2012. The draft plan will be available to be downloaded and reviewed on the State Parks' webpage or those interested could request a hard copy. Written comments could be submitted by email or regular mail.

Staff will prepare the final plan for approval after evaluating all comments received during the comment period. Staff will submit the final plan to AORCC in November 2012 for its adoption and recommendation to the ASPB. Upon AORCC's recommendation, staff will submit the final plan to the ASPB in December for approval. Upon the ASPB's approval, staff will submit the 2013 SCORP to the Governor of Arizona for certification of adequate public involvement in the plan.

Once completed, the plan is reviewed and approved by the National Park Service, extending Arizona's eligibility to participate in the Federal Land and Water Conservation Fund program for another five years.

The final 2013 SCORP will be available by early 2013 on the Arizona State Parks website: www.azstateparks.com.

Chapter 3

IMPORTANCE OF OUTDOOR RECREATION

WHAT IS RECREATION?

Webster's definition of recreation is *"to create anew, restore, refresh; a refreshment of strength and spirit after work."* Recreation professionals, however, define recreation as any form of experience pursued during leisure time in which an individual engages (physically and/or mentally) from choice because of personal enjoyment and satisfaction which it brings directly to that person. People seek to engage in desired recreational activities in preferred physical, social, and managerial settings in order to experience desired and expected psychological benefits. Managers provide and maintain a spectrum of activities and settings that will provide these desired recreation opportunities (University of Idaho, 2003).

In other words, the goal of management is to provide recreation opportunities so that the public can achieve the kind of recreation experience they are seeking.

What is Outdoor Recreation?

Most people define outdoor recreation activities as those activities that are undertaken outside the confines of buildings (i.e., in the outdoors); do not involve organized competition or formal rules (these are referred to as sports activities); can be undertaken without the existence of any built facility or infrastructure; may require large areas of land, water and/or air; and may require outdoor areas of predominantly unmodified natural landscape. Facilities, site modification or infrastructure may be provided to manage the impacts generated by the activities, however, most outdoor recreation activities can be undertaken without them (Outdoors Queensland, 2006).

For the purposes of this SCORP, we also include outdoor recreational activities such as visiting local parks and natural areas, visiting cultural or historical areas; playing sports such as baseball, soccer, or golf; and attending outdoor events, outdoor concerts and festivals.

More than any other trait, the supply of outdoor recreation resources in the United States is characterized by its diversity. About the only common characteristic that all outdoor recreation resources share is their dependence on land and water resources. Simply put, any land or water resource that has value to humans as an input for producing satisfying leisure experiences is an outdoor recreation resource. Such a broad definition encompasses a wide variety of resource types, settings, and attributes for outdoor recreation. It is common to think of outdoor recreation resources as occurring along a spectrum from the most wild and primitive environments to the most developed places, which provide more amenities and facilities (Betz and Cordell, 1998).

This range of resources corresponds roughly to its providers. The Federal government supplies the large majority of the most undeveloped land and water for recreation, state governments tend to specialize in what has been called “intermediate” recreation areas, and local governments and the private sector provide the bulk of highly developed recreation resources.

People are still playing America’s traditional sports, such as baseball, and soccer, so the traditional sports fields are still in demand, however more people are playing other sports such as golf, or are taking part in more challenging activities, such as competing in triathlons and adventure races. New activities, such as stand up paddling, and geocaching, are also becoming increasingly popular. Technology is continuing to produce new and improved equipment, such as stand up paddle (SUP) boards, snowboards, GPS and satellite tracking units, lightweight mountain bikes, jet skis, ATVs, and rock climbing gear that allow people to increasingly visit areas that were difficult to access in the past.

For the last five years nationwide, non-profit organizations, outdoor recreation and public land managing agencies have been responding to reports that children are spending less time in nature, resulting in negative mental and physical health outcomes, as well as decreased connection to the natural world (Louv, 2005, Pergams & Zaradic, 2006). Research is documenting the importance of introducing children to outdoor recreation. According to the Outdoor Industry Foundation 2012 report, 76% of 6-12 year olds, 68% of 13-17 year olds and 60% of 18-24 year olds reported the reason they got involved in outdoor recreation activities for the first time was due to a family member or friend who participated in the activity. Although this is the most frequent reason for youth ages 17 and below to participate in outdoor recreation activities, young adults age 18-24 were more likely to say they participated to stay physically fit (71%). Also, according to one study, 90% of adults who remain active and engage in outdoor recreation were introduced to outdoor activities during childhood and 49% took part when they were teenagers (Outdoor Industry Foundation, 2012). This has widespread implications as these children become adults and start raising their own families. If they didn’t use parks and recreation areas as children will they use them—and value them—as adults?

This is an especially important question when, as a result of funding reductions to parks and recreation and other land managing agencies, funding gaps are being addressed through fundraising and advocacy efforts. One study suggests that participants in some activity groups may be more likely to contribute financially to support conservation than others, and that visitation to a park may not be sufficient to ensure giving. It must be noted, however that the researchers included a limited amount of conservation groups in the study, therefore a deeper examination of this relationship may be in order (Zaradic, Pergams, & Kareiva, 2009).

City Parks

City parks serve a multitude of purposes. Collectively, they provide playfields, teach ecology, offer exercise trails, serve as a social center, mitigate flood waters, host rock concerts, protect wildlife, supply space for gardens, give a respite from commotion, and much more. Because city parks are in closer proximity to population centers, they serve

the purpose of providing regular access to outdoor recreation activities, and nature, therefore they are particularly important to the quality of life of residents.

U.S. Cities Are Park-Poor

At the turn of the 20th century, the majority of Americans lived in rural areas and small towns, relatively close to the land. By 2010, 80% of Americans were living in metropolitan areas, up from 48% in 1940. Many cities have not adequately planned for this population growth. The residents of many U.S. cities lack adequate access to parks and open space near their homes and the park space in many of these metropolitan areas is inadequate. Even in cities that have substantial park space as a whole, residents of many neighborhoods lack access to nearby parks (Sherer, 2003). In order to assess city park systems across the United States, the Trust for Public Land (www.tpl.org) created a tool which uses park acreage, service & investment (defined as spending per resident and playgrounds per 10,000 residents), and access (defined as percent of the population living within a ten-minute walk of a public park) into a park score. San Francisco's system was rated the highest in the nation, followed by New York and Boston, which tied for second and Washington D.C in third place.

Low-income neighborhoods populated by minorities and recent immigrants are especially short of park space. Minorities and the poor have historically been shunted off to live on the “wrong side of the tracks,” in paved-over, industrialized areas with few public amenities. From an equity standpoint, there is a strong need to redress this imbalance. Among non-Hispanic white adults in the United States, 22.8% engage in recommended levels of physical activity, compared with only 17.3% of non-Hispanic black adults and 14.4% of Hispanic adults. Adults with incomes below the poverty level less likely to engage in recommended levels of physical activity (CDC, 2012).

In the wake of the bursting of the economic bubble of the late 1990s, states and cities facing severe budget crises slashed their park spending, a pattern that was repeated during the economic recession of 2008. The federal government has also cut its city parks spending. In 1978, the federal government established the Urban Park and Recreation Recovery (UPARR) program to help urban areas rehabilitate their recreational facilities. The program received no funding from fiscal year 2003 on, down from \$28.9 million in both 2001 and 2002. The stateside portion of the Land and Water Conservation Fund received relatively little funding from 2006 through 2009, whereas funding has increased from 2010 through 2012.

U.S. voters have repeatedly shown their willingness to raise their own taxes to pay for new or improved parks. Since 2008, 252 conservation funding measures appeared on ballots in 32 states. Voters approved 70% of these, generating \$11 billion in conservation-related funding (Trust for Public Land, 2012).

Arizona's City Parks Ranking

Arizona's city parks represent some of the most diverse recreational lands in the country. Not only do many of our cities and towns provide an excellent range of playgrounds, swimming pools, sports fields and courts, family picnic spots, trails and bike paths, they

also provide fishing lakes, desert mountain preserves, forested open spaces, wildlife viewing areas, museums, historic buildings and archaeological sites.

In a 2011 nationwide study of parks by the Center for City Park Excellence, there were some interesting facts when comparing Arizona's local parks ranking with other states. Arizona has three of the top ten largest city parks, and five parks out of 100 largest city parks in the U.S.

Table 8. National Ranking of Arizona Cities with Largest City Parks

Rank	Park/Preserve	Acres	City
#4	South Mountain Preserve	16,094	Phoenix
#5	McDowell Sonoran Preserve	16,000	Scottsdale
#10	North Mountain Preserve	7,500	Phoenix
#66	Adobe Dam Recreation Area	1,642	Phoenix
#99 (tie)	Cave Buttes Recreation Area I & II	1,200	Phoenix

Note: Data estimates are from FY2009.

Table 9. Total Parkland as a Percent of Place Area (2011)

Place	Total land area	Total park/open space	% Land area in park/open space
Chandler	36,480 acres	1,528 acres	4%
Gilbert	26,880 acres	1,330 acres	5%
Glendale	35,840 acres	2,160 acres	6%
Mesa	79,990 acres	2,244 acres	3%
Phoenix	303,907 acres	45,202 acres	15%
Scottsdale	117,760 acres	17,172 acres	15%
Tucson	124,588 acres	3,892 acres	3%

Note: Data estimates are from FY2009.

These municipalities have an average of 21 acres of parkland per 1000 residents.

Table 10. Acres of Parkland per 1000 Residents, by Place (2011)

Place	Population	Total park/open space	Total acres per 1000 residents
Chandler	249,535	1,528 acres	6.1 acres
Gilbert	222,075	1,330 acres	6.0 acres
Glendale	253,209	2,160 acres	8.5 acres
Mesa	467,157	2,244 acres	4.8 acres
Phoenix area	1,593,659	45,202 acres	28.2 acres
Scottsdale	237,844	17,172 acres	72.2 acres
Tucson area	543,910	3,892 acres	7.2 acres

Note: Data estimates are from FY2009.

The national median by place for park-related adjusted expenditures per resident (capital and operating expenses) is \$84.

Table 11. Park-related Expenditures per Resident, by Place (2011)

Place	population	adjusted park expenditures	dollars per resident
# 15 Chandler	249,535	\$38,908,751	\$156
Gilbert	222,075	N/A	N/A
# 58 Glendale	253,209	\$16,645,621	\$66
# 50 Mesa	467,157	\$36,606,715	\$78
# 49 Phoenix area	1,593,659	\$125,004,725	\$78
# 32 Scottsdale	237,844	\$25,257,901	\$106
# 39 Tucson area	543,910	\$52,862,000	\$97

Note: Data estimates are from FY2009.

However, when park systems are rated by acreage, service and investment and access, Arizona cities don't fare as well. Mesa, Arizona is one of the cities that had a very low

park score due to lack of city investment (Park score = 31 out of 100). Phoenix's park score was 53.5, and Tucson's was 38.5).

BENEFITS OF PARKS AND OPEN SPACE

In 2009, Arizona State Parks adopted a new vision: Arizona State Parks is indispensable to the economies, communities, and environments of Arizona. The economic recession in 2008 and resulting budget cuts to Arizona State Parks operating and grant funds, and other parks and recreation systems across the state indicated that legislators, the media, and the public as a whole needed to be educated about the importance of parks, the variety of benefits for individuals, families, communities and economies of having clean and safe parks and open space available, especially during times of economic strain.

Parks, natural areas and open space improve our physical and psychological health, strengthen our communities, and make our cities and neighborhoods more attractive places to live and work. The perceived benefits of recreation can be linked directly to the “**quality of life**” of individuals within a larger community.

What constitutes quality of life is subjective and there is much debate about how to determine or quantify it. One approach is to describe the characteristics of the good life (helping others, getting along with family and friends) as dictated by religious or other philosophical systems. A second approach is based on the satisfaction of preferences, whether people can obtain the things they desire commensurate with their resources (buying the ideal house, vacations, hobbies). A third approach defines quality of life in terms of the experience of individuals, using such factors as joy, pleasure, contentment and life satisfaction (Diener and Suh, 1997). Parks, natural areas, open space and related outdoor recreation opportunities provide many benefits to a community's economy, when the necessary actions are taken to productively harness the benefits.

Table 12. Community Benefits of Parks, Open Space and Outdoor Recreation

Some Community Benefits of Parks, Open Space and Outdoor Recreation	Implementation—Community Actions to Capitalize on Outdoor Recreation Benefits
Benefit: Increases land, property and home values; pays for itself through increased property values, revenues and commercial investment; reduction of taxes that may result from development of land and resulting infrastructure and services required to support it	Action: Plans for growth should include land conservation planning; provide parks, trails, open space, greenbelts and natural areas; maintain these areas in order to maximize community benefits
Benefit: Attracts and retains businesses; encourages businesses to relocate or expand; generates employment and tax revenues	Action: Attract investments and relocations through marketing of park, trail and open space amenities, nearby public lands
Benefit: Motivates residential choices; attracts and retains residents who take pride in improving their community	Action: Revitalize cities-parks, gardens and open space stimulate growth and promote inner-city revitalization
Benefit: Reduces healthcare costs; acts as a preventative health service	Action: Provide diverse and accessible parks, greenbelts and trail networks throughout the community; incorporate nonmotorized transportation networks
Benefit: Increases workforce productivity and job satisfaction	Action: Use of parks and trails increase physical exercise promoting healthier bodies, greater stamina, stress reduction, positive attitudes, fewer sick days

Some Community Benefits of Parks, Open Space and Outdoor Recreation	Implementation—Community Actions to Capitalize on Outdoor Recreation Benefits
Benefit: Reduces costs associated with crime and juvenile delinquency	Action: Fund recreation facilities and programs for children, teens and young adults; promote community pride and cohesiveness
Benefit: Attracts visitors/tourists-generates tourism expenditures; a "catalyst" for tourists and related businesses; heritage and eco-tourism	Action: Fund and market resources for tourists; provide parks, trails, open space, natural areas, wildlife habitats, historic sites, botanical gardens, partnerships with land agencies
Benefit: Maintains agricultural economies; often is the highest and best use of the land	Action: Protect farms and ranches, wetlands, and wildlife habitat; offer conservation easements/ purchase of development rights
Benefit: Encourages investment in environmental protection	Action: Prevent floodplain damage through protected greenbelts; improve water quality and quantity through protection of rivers, washes, wetlands

The following sections address these benefits more thoroughly.

Table 13. Personal/Health Benefits and Outcomes

PERSONAL/HEALTH BENEFITS/OUTCOMES
<ul style="list-style-type: none"> • Recreation helps people live longer, adding up to 2 years to life expectancy. • Recreation prolongs independent living for seniors by compressing the disease and impairment period typically associated with aging - keeping seniors vital and involved in community life. • Recreation significantly reduces the risk of heart disease and stroke - the leading cause of death in the U.S. • Recreation combats osteoporosis - affecting 25% of postmenopausal women. • Recreation combats diabetes - the fourth ranking killer disease (after heart disease, cancer, and respiratory disease). • Recreation enhances overall health and wellbeing - critical to personal quality of life. • Recreation reduces stress in an increasingly demanding and stressful world. • Recreation builds self-esteem and positive self-image, both essential to mental health and psychological wellbeing. • Recreation is essential to child development - many life skills are learned through recreation and supervised play. • Recreation reduces self-destructive and anti-social behavior in youth. • Recreation and parks enhance life satisfaction levels.

Personal/Health Benefits: *When people have access to parks, they exercise more.*

According to a 2006 report by the Erica Gies for the Trust for Public Lands, *Health Benefits of Parks*, strong evidence shows that when people have access to parks, they exercise more. In addition, physical activity in children is strongly correlated with time spent outdoors, therefore it is important that children have access to safe outdoor spaces (NRPA, 2010). In a study published by the Centers for Disease Control and Prevention (CDC), creation of or enhanced access to places for physical activity led to a 25.6% increase in the percentage of people exercising on three or more days per week. When people have nowhere to walk, they gain weight: dense housing, well-connected streets, and mixed land uses reduce the probability that residents will be obese.

Despite the importance of exercise, less than one-half (48%) of American adults engage in the recommended levels of physical activity, and 24% engage in no leisure-time physical activity, according to the CDC (2012). The problem extends to children: less than three in ten students in grades 9 through 12 engage in recommended levels of moderate-to-intensive physical activity daily. The sedentary lifestyle and unhealthy diet of Americans have produced an epidemic of obesity. Over 30% of adult Americans and 16% of children and teens are obese. The Centers for Disease Control and Prevention has called for the creation of more parks and playgrounds to help fight this epidemic (Gies, 2006).

Trails and paths, especially, offer people opportunities to walk, bike, rollerblade, etc., during leisure time. Trails and paths also offer a nonmotorized means for safely connecting people with local destinations such as schools, transit centers, businesses, and neighborhoods. These multi-purpose facilities make it easier for people to engage in physical activity while carrying out their daily routines, (e.g., commuting to work or school, running errands, visiting neighbors, or enjoying recreational time).

In the U.S., 18% of the Gross Domestic Product goes toward health care expenditures, more than any other country. A sedentary lifestyle is the most significant risk factor for coronary disease, the number one cause of death in the nation, and is also a risk factor for diabetes and cancer. These facts have led to an increase in programs focusing on the health and wellness of the American public (e.g., Let's Move program, Park Prescriptions, etc.). A comprehensive 1996 report by the U.S. Surgeon General found that people who engage in regular physical activity benefit from reduced risk of premature death; reduced risk of coronary heart disease, hypertension, colon cancer, and non-insulin-dependent diabetes; improved maintenance of muscle strength, joint structure, and joint function; weight loss and favorable redistribution of body fat; improved physical functioning in persons suffering from poor health; and healthier cardiovascular, respiratory, and endocrine systems (Sherer, 2003).

Beyond the benefits of exercise, a growing body of research shows that contact with the natural world improves physical and psychological health. Physical activity relieves symptoms of depression and anxiety, improves mood, and enhances psychological well-being (CDC, 1999). Relaxation, rest and revitalization all happen as people participate in outdoor activities. The influence of a natural environment, the opportunity to escape the pressures of urban life and the sense of achievement that occurs through participation all contribute to increasing the ability of individuals to deal with the world around them. A 10% increase in nearby green space was found to decrease a person's health complaints in an amount equivalent to a five-year reduction in that person's age. One study found that the U.S. could save \$20 billion a year in health care costs if every sedentary American walked an hour a day.

Outdoor recreation providers have been focusing on how their organizations and agencies can help to support national health and wellness initiatives, and in doing so, lead to the reduction of health care costs. Programs such as Healthy Parks, Healthy People US, Park

Prescriptions, and No Child Left Inside, have been working towards the goal of getting people outside for health of individuals, communities and the environment.

Table 14. Economic Benefits and Outcomes

ECONOMIC BENEFITS/OUTCOMES	
•	Recreation significantly reduces health care costs - fitness and wellbeing reduces both the incidence and severity of illness and/or disability.
•	Fitness and recreation improves work performance - increased productivity, decreased absenteeism, decreased staff turnover, 'reduced on the job' accidents.
•	Recreation reduces costs associated with crime and social dysfunction.
•	Recreation and parks are significant employment generators - professional athletes/artists, agency/program staff, equipment manufacturing/retail.
•	Small investments in recreation and parks often yield large economic returns - through leverage and multiplier effects.
•	Recreation and parks attract and retain businesses - a key component of quality of life, one of the most important business relocation magnets.
•	Recreation and parks generate tourism expenditure - the essential foundation of the world's third largest industry.
•	Parks and protected open spaces can pay for themselves - through increased adjacent property value/taxes, revenues (e.g. golf), and commercial investment.
•	Parks and open spaces are often the highest and best use of land when sustainable development, risk management (e.g. flood control), storm water management and habitat protection principles are understood and respected.

Economics Benefits: *Parks and open space attract people and businesses and raise property values.*

Repeated studies over the years have confirmed that people prefer to buy homes close to parks, open space, and greenery, if the parks are well maintained and safe, and that parks and open space increase the value of neighboring residential property. The real estate market consistently demonstrates that many people are willing to pay a larger amount for a property located close to parks and open space areas than for a home that does not offer this amenity. The higher value of these homes means that their owners pay higher property taxes. In some instances, the additional property taxes are sufficient to pay the annual debt charges on the bonds used to finance the park's acquisition and development (Active Living Research, 2010; Crompton, 2007). Finally, it is important to note that the nonmarket values of parks and open space may be underestimated in such studies (Active Living Research, 2010).

One key study in 1999 by Steve Lerneris and William Poole, *The Economic Benefits of Parks and Open Space*, looked at the effect of proximity to greenbelts in Boulder, Colorado. The study showed that, other things being equal, there was a \$4.20 decrease in the price of residential property for *every foot* one moved away from the greenbelt, and that the average value of homes next to the greenbelt was 32% higher than those 3,200 feet away. The same study showed that the greenbelt added \$5.4 million to the total property values of one neighborhood. That generated \$500,000 per year in additional potential property taxes, enough to cover the \$1.5 million purchase price of the greenbelt

in only three years. Other studies have found similar results in Portland, Oregon, when examining the impact of agricultural lands in Maryland, and on lands adjoining natural forest areas (Active Living Research, 2010).

In a 2001 survey conducted for the National Association of Realtors by Public Opinion Strategies, 50% of respondents said they would be willing to pay 10% more for a house located near a park or other protected open space. In the same survey, 57% of respondents said that if they were in the market to buy a new home, they would be more likely to select one neighborhood over another if it was close to parks and open space.

A park can become one of a city's signature attractions, a prime marketing tool to attract tourists, conventions, and businesses. City parks such as San Antonio's Riverwalk Park and Tempe's Town Lake often become important tourism draws, contributing heavily to local businesses. Organized events held in public parks—arts festivals, athletic events, food festivals, musical and theatrical events—often bring substantial positive economic impacts to their communities, filling hotel rooms and restaurants and bringing customers to local restaurants, bars and stores.

In this time of budget austerity, one point is crucial: to protect the positive economic impact of parks, the parks must be well maintained and secure. A park that is dangerous and ill kept is likely to hurt the value of nearby homes.

Parks and open space create a high quality of life that attracts tax-paying businesses and residents to communities. Commercial asking rents, residential sale prices, and assessed values for properties near a well-improved park generally exceeded rents in surrounding submarkets. The availability of park and recreation facilities is an important quality-of-life factor for corporations choosing where to locate facilities and for highly educated, professional employees choosing a place to live. Urban parks, gardens, and recreational open space stimulate commercial growth and promote inner-city revitalization. American cities large and small are creating parks as focal points for economic development and neighborhood renewal.

Open space preservation helps communities grow smart, preventing the higher infrastructure costs of unplanned development. The most successful higher-density neighborhoods—those most attractive to homebuyers—offer easy access to parks, playgrounds, trails, greenways and natural open space. To truly grow smart a community must decide what lands to protect for recreation, community character, the conservation of natural resources, and open space. Instead of costing money, conserving open space as a smart growth strategy can save communities money. Even groups that usually oppose taxation have come to recognize that new taxes to acquire open space may save taxpayers money in the long run.

Open space boosts local economies by attracting tourists and supporting outdoor recreation. Across the nation, parks, protected rivers, scenic lands, wildlife habitat, and recreational open space help support a \$1.3 trillion tourism industry. Recreation and attractions are one of the four subsectors of the tourism industry that make up 60% of

industry sales. In addition, in 2010, the tourism industry supported 7.7 million American jobs.

Communities benefit from tourism and recreation on nearby federal lands. The National Park Service estimates that in 2010 national park visitors spent \$12.13 billion within 60 miles of parks, resulting in value added of \$16.6 billion, which includes labor income, profits, rents and indirect business taxes. Recreation is a major producer of direct revenue from U.S. Forest Service lands, which, according to the 2010 National Visitor Use Monitoring report, contributes \$14.5 billion annually to the U.S. economy. Data collected between 2005 and 2009 on US Forest Service lands in Arizona revealed that \$634 million was estimated to have been spent annually by visitors within 50 miles of the forests, including \$465 million from non-local visitors.

Hiking and biking trails and all-terrain vehicle routes can also stimulate tourism. Each year 800,000 people come to hike or bike on the Great Allegheny Trail – a 141 mile trail from Cumberland, Maryland to Homestead, Pennsylvania. Trail users spent \$40.8 million in 2008. In 2008, trail users supported \$7.5 million in wages, and business owners attribute 25% of their business to trail proximity (MacDonald, 2011).

Natural open space supports fishing, hunting, and other wildlife-based tourism. Fishing boosted the nation's economy by \$97 billion in 2007, supporting 763,000 jobs and generating household income of \$34 billion. Another \$100.8 billion is generated for the U.S. economy each year by people who observe and photograph wildlife (Outdoor Industry Association, 2012).

Outdoor recreation, in particular, represents a vigorous growth areas in the U.S. economy. Public lands, open space and private parks support much of this recreation. Approximately 140 million Americans participate in active outdoor recreation each year. Americans spend money, create jobs, and support local communities when they get outdoors. Simple, healthy outdoor activities such as hiking, biking, skiing, camping, hunting, fishing, canoeing, wildlife viewing and exploring backcountry roads and trails generate enormous economic power and fuel a far-reaching ripple effect that touches many of the nation's major economic sectors. When Americans participate in these activities, they aren't just having fun and staying fit, they are also pumping billions of dollars into the economy. And, 6.1 million Americans depend upon the outdoor recreation economy to make a living, more than in the finance and insurance, construction, or transportation and warehousing industries (Outdoor Industry Association, 2012).

The Recreation Economy:

- contributes \$646 billion annually to the U.S. economy, \$256 billion of which is spent in the Western United States
- supports nearly 6.1 million jobs across the U.S., and 2.3 million in the Western United States
- in the Western United States, outdoor recreation spending resulted in \$110.3 billion in salaries, wages, and business income profits

- generates \$80 billion in annual federal, state and local tax revenue nationally, and \$31 billion in the Western United States
- From 2005 to 2011, the outdoor recreation economy grew by 5% whereas many other sectors of the U.S. economy contracted during this same time period

The jobs, tax revenues, and business created by the active outdoor recreation economy are the lifeblood of rural communities that rely on recreation tourism to enjoy a high quality of life. Mining, logging, oil and gas, and agriculture are the traditional backbone of many rural economies. Today, the sustainable active outdoor recreation economy has joined that list as communities seek to create a balanced and stable base for long-term economic and community development.

The most obvious boost the active outdoor recreation economy gives to the nation comes at the cash register. Participants spend their money on both gear and trips.

- Quality gear is key to a fulfilling outdoor experience, and Americans spend \$120.7 billion each year on their equipment, apparel, footwear, accessories, and services.
- Americans want to spend money on active outdoor excursions, and they spend \$524.8 billion on trips ranging from a summer camping vacation to an afternoon family bike ride.

That adds up to a whopping \$646 billion spent annually on active outdoor recreation gear and trips, a bigger direct expenditures contribution to the U.S. economy than that of the pharmaceuticals (\$331 billion), motor vehicles and parts (\$340 billion), and household utilities (\$309 billion) (Outdoor Industry Association, 2012).

Table 15. Economic Contribution of National Outdoor Recreation Spending by Activity

Activity	# Participants participating	% Population participating	Gear Retail Sales	Trip Related Sales	# Jobs Supported	Taxes Fed/State	Total Economic Contribution
Wildlife viewing	21,964,000	7.7%	\$10.7B	\$22.5B	722,398	\$43B	\$100.8B
Bicycling	42,970,000	15%	\$10.5B	\$70.7B	1,478,475	\$26B	\$198.7M
Trail Sports*	47,197,000	17.6%	\$12.2B	\$68B	1,466,941	\$26B	\$196.8B
Camping	43,301,000	14.9%	\$18.6B	\$124.7B	2,618,577	\$40.4B	\$356.4B
Fishing	45,394,000	16%	\$9.7B	\$25.7B	763,262	\$7B	\$97.7B
Water sports**	46,432,000	17.1%	\$19.4B	\$66.7B	1,521,486	\$20.8B	\$206.3B
Snow sports***	28,308,000	9.9%	\$7.7B	\$45.3B	964,884	\$16.8B	\$129.6B
Hunting	14,007,000	4.9%	\$8.5B	\$14.6B	460,223	\$7.6B	\$61.9B

Source: Outdoor Industry Association, The Outdoor Recreation Economy. 2012.

Note: Table includes direct spending (Gear & Retail Sales, Trip Related Sales) and impacts created from direct spending in addition to total estimated spending in the economy simulated by businesses and their employees re-spending recreation dollars on business inputs and via paychecks (e.g., the ripple effect) (# jobs supported, taxes federal and state, and total economic contribution).

Participation rates were generated from Outdoor Industry Association's Outdoor Recreation Participation Report, 2012.

*Participation in Trail Sports was generated by using participation rates for hiking, backpacking, and trail running.

**Participation in Water sports was generated using participation rates for boardsailing/windsurfing, canoeing, kayaking, rafting, sailing, scuba diving, snorkeling, stand up paddling, surfing, and wakeboarding.

***Participation in snow sports was generated by combining participation rates for snowboarding, snow-shoeing,

telemarking, downhill and cross-country skiing.

Table 16. Environmental Benefits and Outcomes

ENVIRONMENTAL BENEFITS/OUTCOMES	
•	Parks and open space protect biodiversity and ecological integrity - essential to sustainability.
•	Parks and open space improve air quality in urban areas - the 'urban lung' effect of trees and the reduction of atmospheric pollution.
•	Parks and open space is often the most effective solution for handling storm water – economical and ecologically sound.
•	Outdoor recreation is the best way to increase ecological understanding and sensitivity – prerequisites to sustainability.
•	Parks and natural environments have great spiritual meaning for many - religious and philosophical benefits.
•	Trail and pathway systems save energy and protect air quality by encouraging non-motorized transportation.
•	Parks and open spaces mitigate against potential environmental disaster - slip zones, aquifer depletion, flooding, etc.

Environmental Benefits: *Green space cools and cleans our air and helps control flood waters.*

Green space in urban areas provides substantial environmental benefits. The U.S. Forest Service calculated that over a 50-year lifetime *one tree* generates \$31,250 worth of oxygen, provides \$62,000 worth of air pollution control, recycles \$37,500 worth of water, and controls \$31,250 worth of soil erosion. In an area with 100% tree cover (such as contiguous forest stands within parks), trees can remove from the air as much as 15% of the ozone, 14% of the sulfur dioxide, 13% of the particulate matter, 8% of the nitrogen dioxide, and 0.05% of the carbon monoxide (Sherer, 2003).

Trees and the soil under them act as natural filters for water pollution. Their leaves, trunks, roots, and associated soil remove polluted particulate matter from the water before it reaches storm sewers. Trees absorb nutrients created by human activity, such as nitrogen, phosphorus, and potassium, which otherwise pollute streams and lakes. Trees also act as natural air conditioners to help keep cities cooler, mitigating the effects of concrete and glass that can turn cities into ovens under the summer sun. The evaporation from a single large tree can produce the cooling effect of ten room-size air conditioners operating 24 hours a day.

Trees more effectively and less expensively manage the flow of storm water runoff than do concrete sewers and drainage ditches. Runoff problems occur because cities are covered with impervious surfaces such as roads, sidewalks, parking lots, and rooftops, which prevent water from soaking into the ground. Trees intercept rainfall, and unpaved areas absorb water, slowing the rate at which it reaches storm water facilities. It is estimated that trees in the nation's metropolitan areas save the cities \$400 billion in the cost of building storm water retention facilities. Yet natural tree cover has declined by as much as 30 percent in many cities over the last several decades. Imagine what several city parks landscaped with trees could do (Sherer, 2003).

Floodplain protection offers a cost-effective alternative to expensive flood-control measures. According to the U.S. Army Corps of Engineers, flood damages in the U.S. average \$4.3 billion each year. But a protected floodplain contains no property to be damaged and acts as a permanent "safety valve" for flooding, reducing destruction to developed areas downstream. A 1993 study by the Illinois State Water Survey found that

for every 1% increase in protected wetlands along a stream corridor, peak stream flows decreased by 3.7%. The estimated value of all economic benefits generated by a single acre of wetland is \$150,000 to \$200,000. No wonder that more and more governments at all levels are prohibiting development in floodplains or are acquiring floodplains for permanent flood protection (Lerneris and Poole, 1999).

Protected floodplains also create economic benefits by providing open space for recreation, wildlife habitat, and farming. A protected floodplain that doubles as a wildlife refuge or recreation area may generate economic benefits by attracting hunters, birdwatchers, and other tourists to a community.

Outdoor recreation participants have historically demonstrated their willingness to preserve the conservation values of sites through maintenance and rehabilitation projects arising through an active communication and consultation process with landholders. They are willing to contribute to management strategies that reduce impact. Land management agencies have the opportunity to utilize impact assessment as well as collaborating with outdoor recreation groups to minimize impact.

Furthermore, research supports the concept that personal attachment to a site, with associated feelings of ownership and duty of care for that site, is generated by outdoor recreation involvement. This is of particular importance given the current economic context, as agencies look for volunteers, Friends Groups and non-profit organizations to collaborate to accomplish agency missions. This means outdoor recreation participants are likely to be highly motivated to assist in conservation initiatives on a site to which they feel attached. Collaboration and consultation with these groups and individuals are likely to result in successful communication of and compliance with restrictions on sites with conservation values that are incompatible with outdoor recreation use. In addition they are more likely to be prepared to pay for environmental protection and rehabilitation. Finally, this information suggests that knowing more about Involved Recreation Users will be useful for recreation providers, since they are the likely collaborators who will allow agencies to continue to meet their missions and visions, despite recent budget and staffing reductions. Outdoor recreation activities based in natural environments raise the profile and community importance of looking after these places, providing insurance for a new and improved environmental future.

Table 17. Social Benefits and Outcomes

SOCIAL BENEFITS/OUTCOMES	
•	Recreation produces leaders that will serve their communities in many ways.
•	Recreation reduces isolation and loneliness - a particular problem for many seniors.
•	Recreation reduces crime and other anti-social behaviors.
•	Recreation reduces racism - nurturing ethnic and cultural harmony in the community.
•	Recreation and parks build strong families - the foundation of a healthy community.
•	Recreation provides safe, developmental opportunities for the latch-key child.
•	Recreation builds social skills and stimulates participation in community life.
•	Recreation builds strong, self-sufficient communities.
•	Recreation nurtures and supports independent living for those with a disability – building the skills, confidence and community contacts required.
•	Recreation and parks services build pride in a community - enhancing perceived quality of life.

Social Benefits: *Parks and open space improve our quality of life in many ways.*

City parks produce important social and community development benefits. Among the most important benefits of city parks, though perhaps the hardest to quantify, is their role as community development tools. They make inner-city neighborhoods more livable; they offer recreational opportunities for at-risk youth, low-income children, and low-income families; and they provide places in low-income neighborhoods where people can feel a sense of community (Sherer, 2003).

Access to public parks and recreational facilities has been strongly linked to reductions in crime and in particular to reduced juvenile delinquency. Recreational facilities keep at-risk youth off the streets, give them a safe environment to interact with their peers, and fill up time within which they could otherwise get into trouble. Research supports the widely held belief that community involvement in neighborhood parks is correlated with lower levels of crime. Importantly, building parks costs a fraction of what it costs to build new prisons and increase police-force size (Cameron and MacDougall, 2000).

For small children, playing is learning. Play has proved to be a critical element in a child's future success. Play helps kids develop muscle strength and coordination, language, cognitive thinking, and reasoning abilities. Play also teaches children how to interact and cooperate with others, laying foundations for success in school and the working world. Exercise has also been shown to increase the brain's capacity for learning.

Green spaces build community. Research shows that residents of neighborhoods with greenery in common spaces are more likely to enjoy stronger social ties than those who live surrounded by barren concrete. These benefits often arise in the context of community gardens. Community gardens increase residents' sense of community ownership and stewardship, provide a focus for neighborhood activities, expose inner-city youth to nature, connect people from diverse cultures, reduce crime by cleaning up vacant lots, and build community leaders.

Conclusion

In the 2003 Trust for Public Land report, *The Benefits of Parks*, by Paul Sherer, there is overwhelming evidence that demonstrates the benefits of city parks and open space. They improve our physical and psychological health, strengthen our communities, and make our cities and neighborhoods more attractive places to live and work. While Yellowstone, Yosemite, and other wilderness parks are national treasures, Americans need more than once-a-year vacations in faraway national parks. We need parks near our homes, in the cities where 80% of Americans live, where we can enjoy them and benefit from them in our daily lives.

But too few Americans are able to enjoy these benefits. The lack of places for regular exercise has contributed to America's epidemic of obesity among adults and children, an epidemic that will have dire consequences on both our health and our finances. Building

a basketball court is far cheaper than building a prison block. Yet because we have not invested in city parks, many children have nowhere to play outdoors. A generation of children is growing up indoors, locked into a deadened life of television and video games, alienated from the natural world and its life-affirming benefits.

All Americans should join the effort to bring parks, open spaces, and greenways into the neighborhoods where all can benefit from them. While government plays a vital role in the creation of public parks, governments cannot do the job alone.

Achieving this vision will depend on the planning skills and efforts of nonprofit groups; on the input of neighborhood groups and community leaders in designing the parks; and on the financial support and moral leadership of community-minded individuals and businesses. Working together, more Americans can experience the joys of jogging down a tree-lined path, of a family picnic on a sunny lawn, of sharing a community garden's proud harvest. Parks create green oases that offer refuge from the alienating city streets, places where people can rediscover their natural roots and reconnect with their souls. Parks are vital components of our everyday lives.

Chapter 4

OUTDOOR RECREATION SITUATION AND TRENDS

INFLUENCES ON RECREATION IN ARIZONA

Many factors influence the outdoor recreation opportunities in a particular area. Factors such as climate, geography, hydrology, vegetation and landscape provide the building blocks. Every State has unique challenges and opportunities when it comes to meeting the demands for outdoor recreation.

Arizona is an arid land with average annual rainfall varying from three inches in Yuma in the southwest corner, seven inches in Phoenix in the middle, to 23 inches in Flagstaff in the northern part of the state. The southern and western parts of the state are predominantly desert with numerous isolated mountain ranges (Basin and Range Province). The central and eastern areas are mainly high-elevation forested lands (Transition Zone), and the northern part is primarily high desert interspersed with a few mountain ranges and scenic geologic features such the Grand Canyon and Monument Valley (Colorado Plateau). (see Appendix AZ Landforms, back of plan)

Land Ownership

As the sixth largest state in the Nation when it comes to total acreage, Arizona has plenty of land (and water) to experience nearly any desired outdoor recreation experience. The State has approximately 73 million acres (113,417 square miles). Like many western states, Arizona has very complex land ownership patterns. Federal governments manage 42% of Arizona's land base and most of it is open to public recreation use. Tribal governments own and manage 27.5% and provide some of the State's premier recreation opportunities to camp, boat, fish, hunt, hike and ski. The State Land Department manages 12.8% as State Trust land and while not considered "public" land, Trust lands are accessible for recreational use through a recreational permit or use fee (ASLD, 2006). (see Appendix X. AZ Land Ownership, back of plan)

The 17.7% of the land base in private ownership includes many resorts and spas, dude ranches, secluded bed and breakfasts, museums, historic sites, botanical gardens, land trust preserves, and other enjoyable attractions. This 17.7% also includes the small percentage of the State owned by local governments and other state agencies, providing a wide range of city, county and state parks and nature preserves.

Arizona offers a wide variety of outdoor recreation opportunities with six National Forests, twenty-one National Park sites, eight National Wildlife Refuges, nine Bureau of Land Management Field Offices, twenty-one federally recognized Indian tribes, thirty State Parks, twenty-three State wildlife areas, and hundreds of county and city parks and recreation areas. These public lands provide opportunities for activities such as picnicking, developed and primitive camping, wilderness backpacking, hiking, mountain

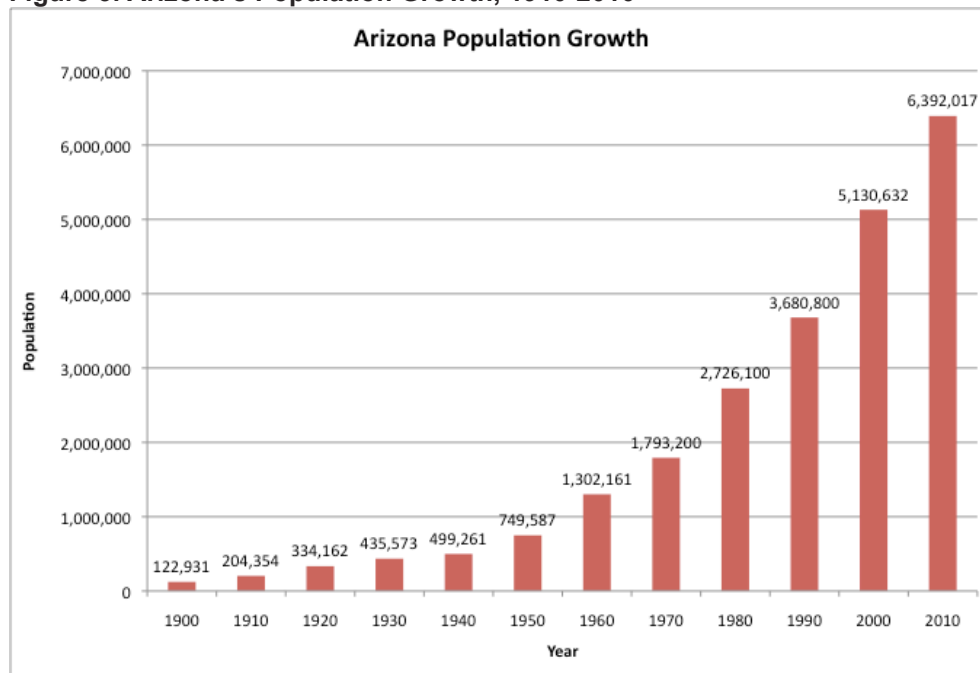
biking, horseback riding, cross-country skiing, bird and wildlife watching, hunting, fishing, boating, water skiing, rock climbing, four-wheel driving, motorized trail biking, all-terrain vehicle riding and snowmobiling, among others. Municipal parks offer facilities such as playgrounds, picnic sites, walking/jogging trails, sports fields, golf courses, swimming pools, dog parks, skate parks, nature preserves, greenbelts and other open space, as well as numerous recreation and leisure programs and classes. The private sector also provides opportunities for a myriad of activities and programs including ski resorts, water parks, golf courses, nature preserves, horse stables, rentals of recreational vehicles, boats, canoes and other recreational equipment, outfitter guides, and guided trips and adventures.

Arizona's Population Growth

As the population of Arizona increases, so does the number of people participating in outdoor recreation activities. At statehood in 1912, Arizona was populated by approximately 200,000 people and had a population density of two people per square mile. In 1940, just before World War II, Arizona's population was less than one-half million people with a population density of four people per square mile. Since that time, the population has grown phenomenally as people recognize Arizona's economic potential and quality of life (US Census Bureau, 2010). According to the U.S. Census Bureau, in 2011 Arizona's population reached 6.4 million people. This makes up 2.1 percent of the U.S. population at 308.7 million people.

People are drawn to the state's scenic beauty, wide open spaces, year-round climate, cultural diversity and its incredible outdoor recreation opportunities. Arizona is also a major destination site for millions of visitors each year. In 2008, Arizona was labeled as one of the top fastest growing states in the U.S. This slowed down on the onset of the recession. As of 2011, is now the 8th fastest growing state in the U.S.

State	<u>Increase (April 1, 2010 – July 1, 2011)</u>
District of Columbia	2.7%
Texas	2.1%
Utah	1.9%
Alaska	1.8%
Colorado	1.7%
North Dakota	1.7%
Washington	1.6%
Arizona	1.4%
Florida	1.4%
Georgia	1.3%

Figure 3. Arizona's Population Growth, 1910-2010

Arizona can no longer be considered a sparsely populated state. Arizona has the second fastest rate of population growth in the country, falling behind Nevada. Maricopa County is the fourth most populous county and Pinal County is the second fastest growing county in the country. Phoenix remains the sixth largest city in the United States, while Surprise and Goodyear are with in the top ten fastest growing incorporated places in the Nation (2nd and 4th respectively). (US Census Bureau 2010)

By 2030, Arizona is projected to be the Nation's tenth largest state in population with 10.7 million people.

The makeup of Arizona's population is also predicted to change substantially over the next few decades which may influence the demand for different types of outdoor recreation. For example, the proportion of Arizona's population classified as elderly is expected to increase from 13.0 % in 2000 to 22% in 2030. The percentage of children in Arizona under the age of eighteen will decrease from 26.6% in 2000 to 24.3% in 2030.

Arizona has the 2nd highest net migration of people over the age of 65 in the United States. Approximately one-quarter of recent immigrants 65 and older came from California and Washington (U. S. Census Bureau, 2000, migration of older individuals report). Yuma, La Paz and Pinal counties had the highest rate of net migration of individuals 65 and over between the years 1995 and 2000, followed by Cochise, Pima, Maricopa, Yavapai and Mohave counties.

These changes will significantly impact outdoor recreation in Arizona. In order to accommodate this population, it is important for outdoor recreation providers to understand the leisure opportunities that are being and will be sought out by this group.

Urban—Rural Proportions

Of particular note is the incredible change in Arizona's urban and rural populations. Over the last 100 years, the ratio between Arizona's rural and urban populations has essentially reversed. In 1900, less than 20% of the state's population lived in an urban setting; in 2000, more than 88% live in an urban setting. While both rural and urban county population numbers have experienced a steady climb since 1900, the predominantly urban counties of Maricopa and Pima account for the majority of the population increase.

Sixty percent of the total population in Arizona resides in Maricopa County, which includes the Greater Phoenix area. Pima County, which includes the Greater Tucson area, is home to 15 percent of the population and the remaining 25 percent of the population resides in the balance of the state (AZDES, 2010).

Additionally, traditional use areas and wildland recreation landscapes are now “just out the back door” for many historically rural, but increasingly urban communities. This locational change can affect how residents view the natural world, environmental issues and their participation in outdoor recreation activities.

The USDA Forest Service (USFS) reports urban growth has been most pronounced in the Intermountain West region. Counties with large tracts of public lands appeal to people seeking recreation access, open space and wildlands. Often, population growth in these counties is linked to their appeal as retirement and recreation destinations in part due to the number of natural amenities they offer. Most of Arizona's counties were above the mean in terms of quantity of natural amenities. Approximately one-third of the total population increase that occurred in the United States between 1980 and 2000 took place in counties that contain USFS lands, a trend which is expected to continue.

As the urban population of the U.S. continues to grow, scientific studies are documenting the impacts of these shifts on the health and well-being of residents. Galea and Vlahov (2005) have identified several aspects of urban development that have links to health in residents: the urban physical environment, the urban social environment and access to health and social services. Not surprisingly, urban development (e.g., density of development, aesthetic qualities of a place, etc) in combination with other factors such as pollution and access to green space is linked to the frequency of physical activity, which in turn is linked to health outcomes for residents.

Trends in population growth and changes in the demographic, social and economic characteristics of our communities must be factored into recreation site planning and investments.

NATIONAL AND STATE PARKS (Appendix)

National Park Visitation

Visitation numbers at National Parks nationwide have stayed largely the same for the last 10 years, with over 250 million recreation visits per year (NPS, 2012). In Arizona, there were 10.5 million recreation visits to lands managed by National Parks in 2010 alone. Visitation reached a 10-year low in 2003, and a 10-year high in 2009. There has been a downward trend in tent, backcountry and RV camping since 2001, although for all activities there was a rebound starting in 2009. However, researchers are documenting a longer term decrease overall which began in 1981-1991, in the extent to which people are engaging in nature-based recreation at a variety of public land sites (e.g., National Parks, National Forests, State Parks, BLM lands, as well as national park visits in Spain & Japan) (Pergams & Zaradic, 2008). The researchers state that per capita visits to National Parks and other public lands have been declining, therefore visitation to National Parks has not been keeping pace with population growth.

Hypotheses for the recent changes in visitation abound. National Parks received nationwide attention in Fall of 2009, when Ken Burns released a widely acclaimed series, “National Parks, America’s Best Idea.” In addition, the media reported that due to the economic recession, many Americans were staying closer to home and exploring domestic treasures instead of traveling out of state or out of the country. Also, the cost of camping in a national park, as opposed to staying in a hotel, allowed families to stretch tight budgets while still taking a family vacation. In addition, during the early years of the recession, as the American dollar decreased in value, vacationing in the United States became even more affordable for international visitors, who are likely to visit iconic national parks, such as the Grand Canyon, Arches National Park and others during their trips.

In recent years, agency officials have focused attention on attracting two large constituencies—young people and minorities, due to studies suggesting that these groups are not visiting parks. NPS is addressing these issues through an evaluation and updating of interpretive information to include multiple perspectives from a variety of ethnic and cultural groups, by working with communities to get more diverse groups of residents to parks, and by adding units to the system that tell stories of the immigration and establishment of ethnically diverse communities. National Parks are trying to engage more youth by offering programs such as the Junior Ranger program, Parks Prescription, etc. which focus on the health benefits of parks to youth and families and engage youth in educational but fun activities while at the parks, and the establishment of a Public Lands Service Corp to engage youth and young adults in public land stewardship and attract talent into the National Parks system (NPCA Diversity Task Force Report, 2009). and programs such as the Junior Ranger program, Parks Prescription, etc. which focus on the health benefits of parks to youth and families and engage youth in educational but fun activities while at the parks.

Fewer young children playing outdoors

According to the 2006 study done by Oliver Pergams and Patricia Zaradic, per capita visits to U.S. national parks have declined since 1988, after 50 years of steady increase. This decline, coincident with the rise in electronic entertainment media, may represent a shift in recreation choices with broader implications for the value placed on biodiversity conservation and environmentally responsible behavior. Factors considered during the study included hours of television, video games, home movies, theater attendance and internet use per year; additional factors included federal funding to parks, park capacity, fee and management structures, ecotourism, oil prices, foreign travel, more extreme outdoor recreation, reduced number of vacation days, median family income, and the aging of the baby boomer generation.

Indications for park visit declines pointed to sedentary recreation choices involving electronic media, also increasing oil prices and foreign travel. There were no indications that available vacation time, fee structure, park capacity, income or age were factors in declining park visits. The study authors speculate that the U.S. may be seeing evidence of a fundamental shift away from people's appreciation of nature. It has been found important that people be exposed to natural areas as children if they are to care about them as adults. Similarly, it has been found that environmentally responsible behavior results from direct contact with the environment rather than knowledge of ecology.

Data from the Outdoor Industry Association (2012) found that youth (ages 6-12) participation in outdoor recreation leveled off in 2010, and increased by one percentage point in 2011 as compared to prior years. The most popular activities for youth ages 6 to 17 were road, mountain or BMX biking, running, jogging or trail running, car, backyard or RV camping, freshwater, saltwater or fly fishing and hiking. However, 29% of 6-12 year olds, 45% of 13-17 year olds say that they do not participate in outdoor activities because they are not interested.

Some parks are using technology to draw teenagers in. Officials at Santa Monica Mountains National Recreation Area are experimenting with a Pocket Ranger game that simulates activities available in the park. The game can be downloaded from a website to iPods and other devices and continued in the park as a kind of scavenger hunt. Other parks have apps available for smart phones which allow visitors to access information about the park easily, and apps that help identify birds, plants, and wildlife allow visitors to enjoy an educational experience while using technology.

State Park Visitation

For the past five years, annual visitation to the parks managed by Arizona State Parks has fluctuated between 2.5 million visitors and 2.0 million visitors. Based on more than a decade of public surveys, approximately half of all visitors to Arizona State Parks are Arizonans, while the remaining half are visitors from out-of-state or are international visitors and approximately 97% rate their satisfaction with their visit as excellent or good.

Table 19 shows total visitation for each park in fiscal years 2006/07 and 2010-11, and the percent change in visitation over that time. During this time a number a majority of the

individual parks in the State Parks system experienced declining visitation. It is important to note that during this time due to the economic downturn that had devastating impacts, both nationally, and on a state-by-state basis, park funding was reallocated resulting in park closures, reduced park hours of operation and seasonal operation of some parks.

Table 18: Arizona State Parks Visitation — Comparing FY2007 and FY2011

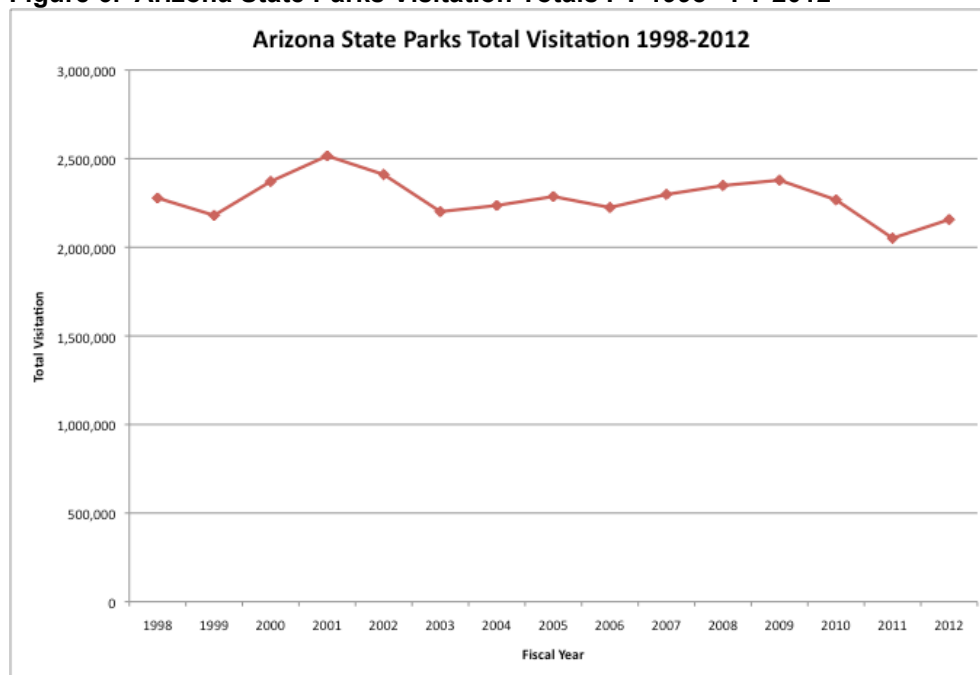
County	State Park Name	Park Visitation FY 2006/2007	Park Visitation FY 2010/2011	Percent Change
Apache	Lyman Lake*	36,298	14,258	-60.72%
Cochise	Kartchner Caverns	155,909	119,157	-23.57%
Cochise	Tombstone *	52,989	47,061	-11.19%
Coconino	Riordan*	26,013	19,419	-25.35%
Coconino	Slide Rock	249,409	217,494	-12.80%
Gila	Tonto Natural Bridge *	94,026	66,487	-29.29%
Graham	Roper Lake	73,230	64,742	-11.59%
La Paz	Alamo Lake	72,066	55,571	-22.89%
La Paz	Buckskin Mountain	96,529	83,554	-13.44%
Mohave	Cattail Cove	98,419	70,828	-28.03%
Mohave	Lake Havasu	314,519	328,699	4.51%
Navajo	Fool Hollow	95,495	90,402	-5.33%
Navajo	Homolovi *	15,953	6,140	-61.51%
Pima	Catalina	149,644	163,325	9.14%
Pinal	Boyce Thompson Arboretum	65,108	72,125	10.78%
Pinal	Lost Dutchman	77,683	88,366	13.75%
Pinal	McFarland*	3,968	4,857	22.40%
Pinal	Picacho Peak*	63,393	63,798	.64%
Santa Cruz	Patagonia Lake	178,497	141,526	-20.71%
Santa Cruz	Tubac Presidio*	14,439	9,252	-22.1%
Yavapai	Dead Horse	120,686	121,850	-35.92%
Yavapai	Fort Verde*	16,950	10,529	-37.88%
Yavapai	Jerome*	60,307	24,374	-59.58%
Yavapai	Red Rock	80,711	54,817	-32.08%
Yuma	Yuma Quartermaster Depot*	17,628	54,269	207.86
Yuma	Yuma Prison*	58,694	58,244	-.77%
Total Visitation		2,513,401	2,051,144	-18.39%

*Note: Park visitation in FY2011 was impacted by park closures, seasonal operation and changes to park operating days and hours.

The Arizona State Parks system has a significant economic impact on the communities and counties in which they are located. A state park's value is, of course, not measured by economic impact alone. Parks enhance community quality of life and preserve priceless historic, cultural, and recreational resources for residents and visitors from around the world. However, communities are increasingly recognizing the economic impact of State Parks as a tourism resource. The following table shows the direct spending of visitors to twenty-six Arizona State Parks on the economies of the thirteen counties in which they are located. In an economic impact analysis, such as the one conducted by the Arizona Hospitality Research and Resource Center at Northern Arizona University in 2009, these numbers, along with park visitation are combined with multipliers reflecting the extent of the re-circulation of visitors' money in the local economy. The NAU report indicated that the economic impact of Arizona State Parks on the Arizona economy was \$266 million, 3,347 jobs were supported, and \$22 million in state and local taxes were generated.

Table 19. Total Visitor Expenditures In and Around Arizona State Parks

Expenditure Categories	2006-7
In-park Expenditures	\$11,415,253
Admission	\$11,319,639
Camping	\$5,810,930
Groceries	\$27,129,959
Food & Beverages	\$24,375,662
Recreation Equipment Supplies	\$4,708,540
Retail Shopping	\$15,347,294
Lodging	\$18,594,618
Personal Auto Expenditures	\$32,345,735
Tourist Services	\$5,012,916
Other Expenses	\$6,738,895
Total	\$163,799,442

Figure 6. Arizona State Parks Visitation Totals FY 1998 - FY 2012

Arizona State Parks conducts the *Consumer Marketing Study*, a research project in conjunction with Arizona State University, to examine recreation and leisure trends among Arizona residents. The study provides information to determine recreation usage patterns, recreation motives, leisure constraints, preferences for services and facilities at Arizona State Parks, attitudes towards fees, and resident demographic characteristics. In addition, a targeted Arizona recreation user population was also given this survey, and the information gathered from this public segment provided a comparison to recreation and leisure trends of Arizona residents. Traditionally this study is conducted every five years.

The *Survey of Arizona State Parks Visitors* provides the Arizona State Parks Board with invaluable information needed to engage in future planning, management and marketing efforts on behalf of Arizona State Parks. The study, which is conducted approximately every five years surveys Arizona State Park visitors on visitor expectations, customer

satisfaction with existing service/facility quality, trip characteristics, experience preferences, perceived benefits, preferences for communication sources/information delivery, economic impacts, quality of facilities and services, demographics, willingness to pay for selected services, and preferences for services, facilities and activities. The Visitor Survey includes each state park and, in the past, has been conducted throughout an entire fiscal year.

ARIZONA'S RECREATION PROVIDERS

Of Arizona's 113,417 square miles, 42% or 47,635 square miles is federal public land. These lands are managed by various agencies most of whom are responsible for providing for both the outdoor recreation needs of the state's six million residents as well as for the protection and preservation of land for future generations.

National Park Service

Created by Congress on August 25, 1916, the National Park Service (NPS) preserves, unimpaired, the natural and cultural resources and values of the National Park system for the enjoyment, education, and inspiration of this and future generations. The National Park system of the United States comprises 397 areas covering more than 84.4 million acres. These areas are of such national significance as to justify special recognition and protection in accordance with various acts of Congress. In Arizona, the NPS manages twenty-two sites totaling 4.6 million acres including thirteen national monuments, one memorial, three national historic sites/parks, one national historic trail, two national recreation areas, three national parks, and four wilderness areas totaling 444,055 acres. The NPS areas include visitor centers and trails to historic, cultural, and natural and scenic sites which were visited by more than 18 million people in 2006.

Beyond managing the national park system, the NPS administers a broad range of programs that serve the conservation and recreation needs of the nation and the world. Although these programs operate outside the National Parks, they form a vital part of the NPS mission. Examples include: National Natural Landmarks Program (eight sites in Arizona), National Historic Landmarks Program (thirty-eight in Arizona), National Register of Historic Places (572 entries in Arizona), National Wild and Scenic Rivers System (a forty mile stretch of the Verde River, managed by the Forest Service), National Trails System, Land and Water Conservation Fund Grants Program, and Rivers, Trails and Conservation Assistance Program. (See Appendix. Arizona Wilderness Areas and Other Federal Designated Areas, back of plan)

Bureau of Land Management

The Bureau of Land Management (BLM) manages more than 12.2 million surface acres of public lands, along with another 17.5 million subsurface acres within Arizona. There are nine field offices throughout the state that provide on-the-ground management of dispersed outdoor recreation activities including camping, backpacking, hiking, biking, boating, fishing, off-highway vehicle driving, picnicking, wildlife viewing, and cultural site touring on land that is mostly undeveloped. The BLM-managed lands offer trails, camping, off-road vehicle recreation, and access to rivers, archaeological and historic sites. The BLM in Arizona hosts approximately 235 developed recreation sites, including

twenty campgrounds, sixteen historic sites, sixteen archeological sites, four national backcountry byways, sixty-one trailheads, and two off-road vehicle areas. There are several concession resorts operating on public lands that complement the BLM's dispersed recreation settings by providing full-service campgrounds, trailer and recreational vehicle parks. The Arizona BLM manages nationally designated areas that include five national monuments (2 million acres), three conservation areas (121,767 acres), forty-seven wilderness areas (1.4 million acres), and three nationally designated trails. The Arizona BLM boasts approximately 14 million visitor days on public lands each year.

U.S. Forest Service

The Forest Service was established in 1905 and is an agency of the U.S. Department of Agriculture. The Forest Service manages public lands in national forests and grasslands, which encompass 193 million acres nationally. The products and services provided from these lands involve five primary resources: wood, water, forage, wildlife and recreation. All of these resources are managed under the Multiple Use Sustained Yield concept to provide the “greatest good to the greatest number in the long run.”

In Arizona, the Forest Service manages over 11.3 million acres of the state's most ecologically diverse lands ranging in elevation from 1,600 feet above sea level to the 12,637 foot high Humphrey's Peak. These lands include the majority of the state's lakes, rivers and streams. They provide opportunities for a wide range of recreational activities including hiking, backpacking, mountain biking, horseback riding, off-highway vehicle driving, camping, boating, canoeing, fishing, hunting, skiing, snow play, rock climbing, canyoneering, caving and nature study. Arizona's six national forests include Apache-Sitgreaves, Coconino, Coronado, Kaibab, Prescott, and Tonto. Within these forests are more than 1.3 million acres of wilderness in thirty-six wilderness areas and one primitive area (Blue Range, 173,762 acres).

U.S. Fish and Wildlife Service

The National Wildlife Refuge System is a unique system of lands dedicated to preserving a rich quality of life for Americans by protecting their wildlife heritage. In the Southwest, national wildlife refuges (NWR) protect some of the most varied wildlife and spectacular landscapes found anywhere in the world. From subtropical shrub ecosystems to saguaro-studded deserts--all are filled with an unparalleled richness and abundance of life. The Fish and Wildlife Service manages eight NWRs in Arizona covering more than 1.7 million acres that are open for wildlife viewing. The FWS manages four wilderness areas totaling 1.3 million acres. NWRs provide opportunities for six wildlife-dependent recreational uses—hunting, fishing, wildlife observation and photography, and environmental education and interpretation—that, when compatible, are the priority general public uses of the Refuge System.

U.S. Army Corps of Engineers

The United States Army Corps of Engineers (USACE) mission is to provide quality, responsive engineering services to the nation including planning, designing, building and operating water resources and other civil works projects, and providing design and

construction management support for Military, Defense and other federal agencies. The USACE cooperates with local and state governments on numerous flood control and ecosystem restoration projects in Arizona, many that include a range of recreation components such as boating, hiking trails, and wildlife viewing. Recent Arizona projects include Alamo Lake, Salt River— Va Shly'ay Akimel, Rio Salado, Tres Rios; Santa Cruz River, Rillito River, Indian Bend Wash, and Rio de Flag.

Bureau of Reclamation

Established in 1902, the Bureau of Reclamation (BOR) is best known for the dams, power plants and canals it constructed in the western United States. These water projects led to homesteading and promoted the economic development of the West. BOR has constructed more than 600 dams and reservoirs including Glen Canyon Dam, Hoover Dam, Davis Dam and Parker Dam on the Colorado River, providing water and hydroelectric power to the western states. The BOR's mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in these structures. The resulting reservoirs provide recreational opportunities such as boating, fishing, camping, and bird watching. Most of the BOR dams created recreational water resources that are managed by other local, state and federal entities.

The BOR's first project, authorized in 1903, was the Salt River Project, in the central portion of the state. This project created Roosevelt Dam and reservoir; it has since been expanded through the combined efforts of private and governmental agencies and now provides extensive recreation opportunities. Another project, the Central Arizona Project, which brings Colorado River water to cities such as Phoenix and Tucson, provides potential for long-distance trails if the liability and multiple jurisdiction issues can be resolved.

Indian Tribe and Nation Lands

Arizona's twenty-one recognized Indian tribes and nations account for a significant portion (27.5%) of land in Arizona. These sovereign entities have long provided visitors the opportunity to learn about their unique and special cultures through outdoor events such as feast days, arts and crafts shows, and tours. While fishing and camping have been popular outdoor activities at Indian managed lakes, the tribes are increasingly capitalizing on their ability to provide other outdoor recreation such as skiing, rodeos, guided hunts, etc. Most recreational uses of tribal lands require a permit.

Arizona State Parks

Established in 1957, Arizona State Parks manages thirty parks and natural areas distributed throughout the state, totaling over 68,000 acres not including water surface area in seven reservoirs. State Parks play an important role in providing for Arizona's residents and visitors developed recreational facilities and a variety of activities including: picnicking, camping, fishing, boating, canoeing, swimming, hiking, horseback riding, mountain biking, visitor centers, museums, historic and prehistoric sites, botanical garden, nature study, environmental education, and wildlife viewing. Many state parks also offer a developed gateway into adjacent federal lands, including backcountry and

wilderness areas. The State Historic Preservation Office, Grants Section and the State Trails and Off-Highway Vehicle Programs are also located within Arizona State Parks.

Arizona Game and Fish Department

Arizona Game and Fish Department (AGFD) is responsible for the state's fish and wildlife resources, regulating hunting, fishing and other "taking of wildlife" activities. The AGFD's mission is to conserve, enhance, and restore Arizona's diverse wildlife resources and habitats through aggressive protection and management programs, and to provide wildlife resources and safe watercraft and off-highway vehicle recreation for the enjoyment, appreciation, and use by present and future generations. The department sells hunting and fishing licenses and special permits, administers watercraft registrations and enforces rules and regulations pertaining to watercraft and off-highway vehicle use, and the protection of wildlife and fish resources. The AGFD provides a number of programs and events open to the public concerning hunting, fishing and other wildlife-related recreational activities. It also manages twenty-three wildlife areas and fish hatcheries that provide for wildlife viewing, and fishing and hunting opportunities, although some include camping, picnic areas, and trails.

Arizona State Land Department

The Arizona State Land Department was established in 1915 to manage the lands in Arizona set aside by Congress for schools and educational purposes and for other beneficiaries. The ASLD currently manages 9 million acres or 12.8% of the state. The original State Land Commission decided that Arizona should not sell its Trust land outright, as other states had done. Instead, it should put the lands to their "highest and best use." The decision to lease or sell the land should be based upon the potential use for each parcel. Its missions have been to manage the Land Trust and to maximize its revenues for the beneficiaries. All uses of the land must benefit the Trust, a fact that distinguishes it from the way public land, such as parks or national forests, may be used. While public use is not prohibited, it is regulated to ensure protection of the land and reimbursement to the beneficiaries for its use.

The ASLD sells a recreational use permit to those interested in recreating on Trust land. Camping, hiking, horseback riding, and other non-consumptive recreational activities are allowed by permit on publicly accessible range land. The Department does not manage or provide facilities for outdoor recreation, except by commercial permits. Possession of a valid hunting or fishing license allows the holder of the license to be on Trust land for the purpose of lawfully taking game.

Arizona Department of Transportation

The Arizona Department of Transportation makes a significant contribution to outdoor recreation through the promotion of alternative non-motorized transportation and multi-use trails. ADOT administers the Transportation Enhancement funds for municipalities seeking funding assistance for projects such as bike lanes, equestrian trails and pedestrian trails and pathways along roads and streets. The Department also provides rest areas throughout the state and manages the Scenic Byways and Back Country Roads which are popular not only with motorists, but with cyclists.

Arizona Office of Tourism

The Arizona Office of Tourism (AOT) is the only entity promoting Arizona as a world-class travel and tourism destination to national and international visitors. AOT works to enhance the State's economy and the quality of life for Arizonans by expanding travel activity and increasing industry related revenues through travel and tourism promotion. The agency markets the State's unique tourism offerings through local, national and international venues, conducts research, partners with public/private sectors and produces publications highlighting points of interest and places to visit, such as the Arizona Office State Visitors Guide & State Map and the Recreation and Cultural Sites Map produced in collaboration with the Arizona Council for Enhancing Recreation & Tourism.

Local Government (Counties/Municipalities/Public Schools)

While many Arizonans travel away from home to enjoy the vast opportunities of Arizona's public lands on the weekends, it is local government which provide most Arizonans with daily accessible outdoor recreation opportunities in the form of parks, playgrounds, sports fields, ball courts, swimming pools, golf courses, picnic areas and trails. Recreation programs, trips and special events are also offered by local parks departments. Most of these areas and programs can be found by accessing local community websites or viewing local maps. Many of the larger urban cities and counties also offer nature preserves and natural areas with trails, nature study opportunities and limited support facilities. A number of towns are developing wetland areas to reclaim wastewater and create a green oasis within their community, providing opportunities for trails and wildlife-viewing.

Most of Arizona's 15 counties operate their own parks. Maricopa County operates large regional parks mainly outside or at the fringe of municipal boundaries, 10 of them covering 120,000 acres, including Lake Pleasant. Pima County offers urban parks, recreation centers and aquatic centers; environmental education and wilderness experiences; hundreds of miles of trails, encompassing more than 233,000 acres in total. In 2010, Maricopa and Pima County Parks accommodated more than 4.2 million total visitors. Coconino County operates six county parks and two conservation areas totaling 2,800 acres, including the signature Fort Tuthill County Park, home of the County Fairgrounds. Pinal County operates five neighborhood parks, including the County Fairgrounds, totaling 295 acres. Pinal County has also adopted an aggressive open space master plan for future implementation. Mohave County Parks administers six parks on 2,374 acres including regional parks that provide boat launching, camping, RV parks, cabin rentals, event venues and other facility based recreation.

Private Sector

Nonprofit organizations and private businesses provide a wide diversity of outdoor recreational opportunities throughout the state. Local land trusts acquire and manage nature preserves and open space within their communities. Local historical societies offer museums and restored historic sites open to the public. National organizations such as the Nature Conservancy and Archaeological Conservancy acquire and manage more remote natural and cultural areas.

Private businesses such as tour guides, outfitters, and rental companies offer a wide range of services to the recreating public. Golf courses, sports fields and arenas, and water parks are popular spots for recreation. Many of these commercial recreation areas are associated with local hotels and resorts.

NATIONAL TRENDS IN OUTDOOR RECREATION ACTIVITY

There are organizations that survey, track and evaluate trends in outdoor recreation participation and characteristics throughout the country. This section will summarize findings from these organizations to highlight national outdoor recreation trends. The key organizations and reports utilized in the sections include:

- The Outdoor Foundation Participation Reports (see <http://www.outdoorindustry.org/research>)
- The National Survey on Recreation and Environment (NSRE) conducted by the U.S. Forest Service research group,
- The Executive Summary of the *Outdoor Recreation Trends and Futures: A Technical Document Supporting the Forest Service 2010 RPA Assessment* is also provided in it's entirety

The Outdoor Foundation's 2012 Topline Participation Report develops shows that overall outdoor recreation participation across the U.S. has remained steady since 2006. The number of outdoor recreation participants has increased since 2006 but the total number of outdoor outings declined slightly during that same period (see Appendix XX). The National Survey on Recreation and Environment (NSRE) found the total number of people participating in one or more of 60 identified outdoor activities increased between 1999 and 2008 by 4.4 percent. Their data also indicates that during that period, the number of days of participation increased as well as the number of participants, by almost 25 percent.

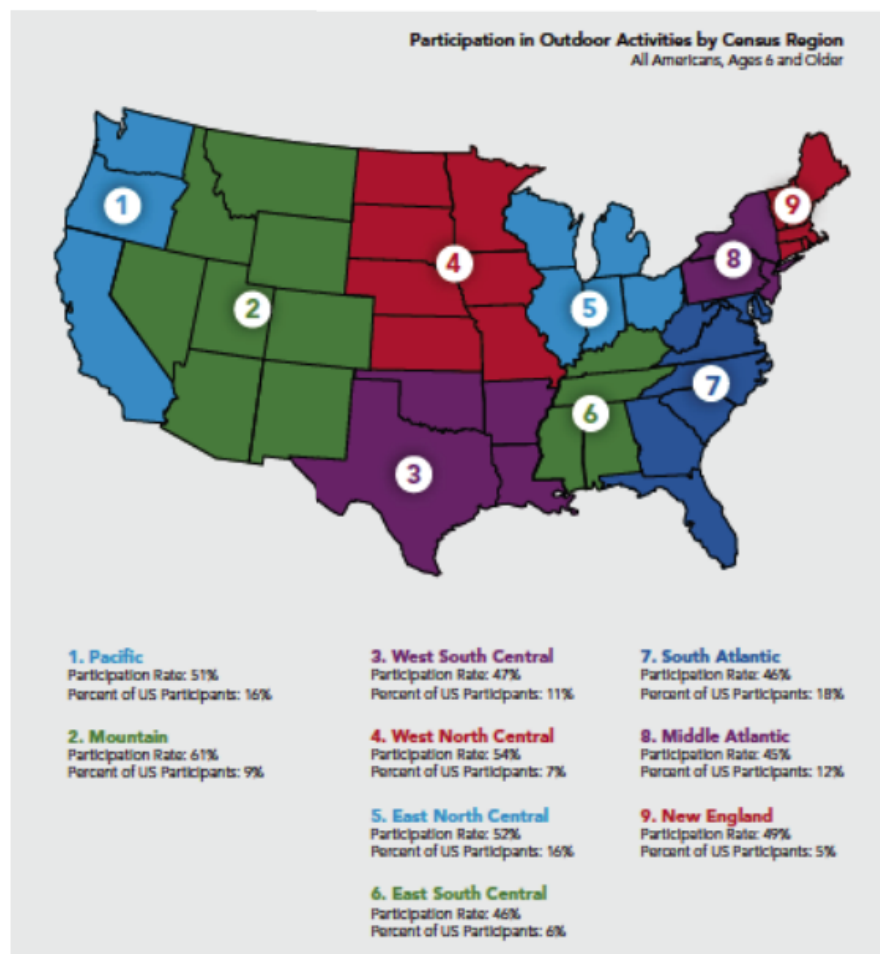
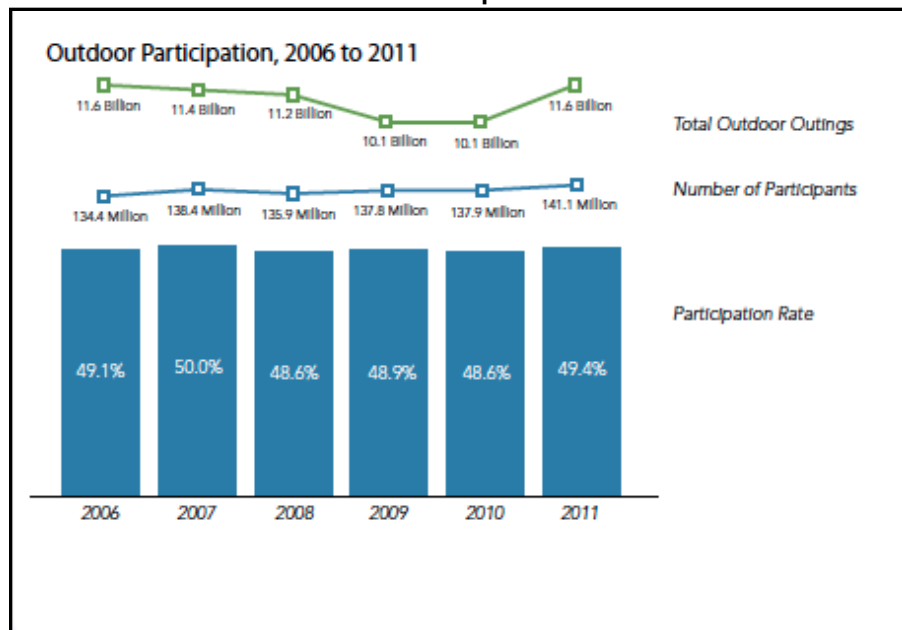
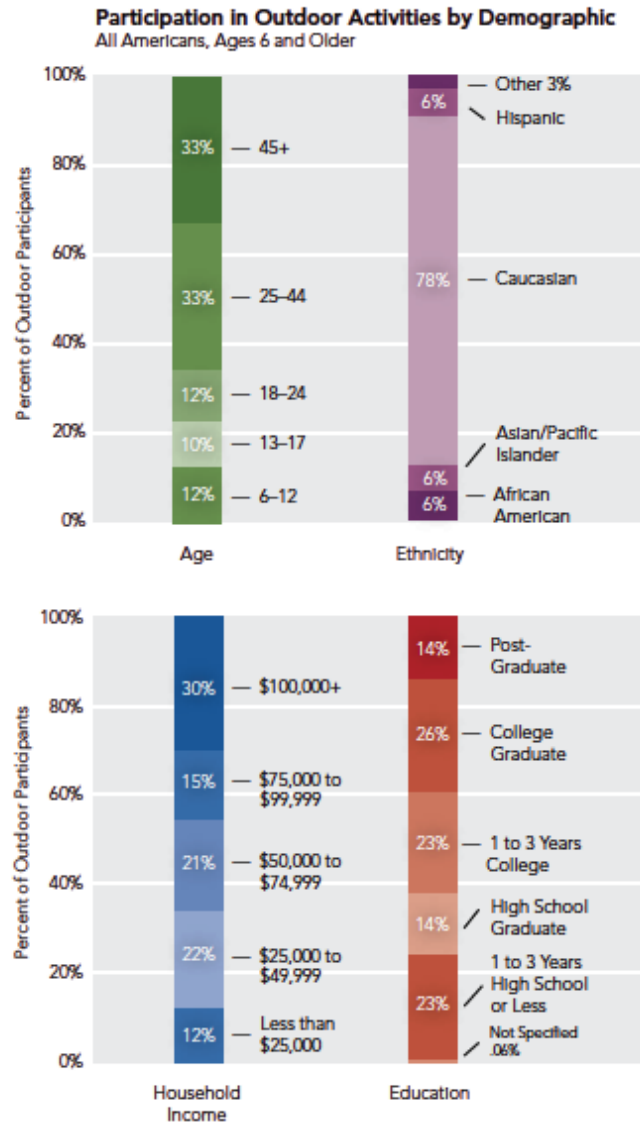
Figure 9: Trends in Outdoor Recreation Participation

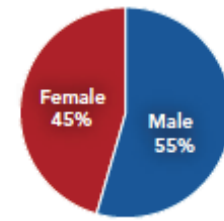
Figure and Data from Outdoor Foundation Participation Report 2012

A Snapshot of Outdoor Enthusiasts

The research shows that participants in outdoor recreation represent a diverse population by geography, age, education and income. Understanding overall demographics is essential to reaching new audiences and inspiring existing enthusiasts.



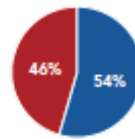
Participation in Outdoor Activities by Gender



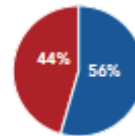
Ages 6+

141.1 Million Participants

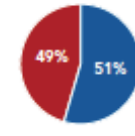
Ages 6-12
17.5 Million Participants



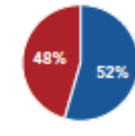
Ages 13-17
14.2 Million Participants



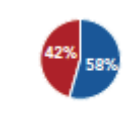
Ages 18-24
16.5 Million Participants



Ages 25-44
46.4 Million Participants



Ages 45+
46.5 Million Participants



Figures and Data from Outdoor Foundation Participation Report 2012

Growing and declining activities

Changes in technology, lifestyles and disposable income are realities of the past five years. Following trends in popularity and participation of outdoor recreation activities can provide insight into how societal changes are affecting outdoor recreation and direct how recreations providers might best respond. A comparison of the NSRE data shows how specific activities are trending since the 2008 Arizona SCORP.

Table 20. Participation Trends of Outdoor Recreation Activities

Outdoor Recreation Activity	Percent Participating		Increase /Decrease
	2005 – 2009	2010 - 2011	
Walking for pleasure	85.0	84.7	-
Family gatherings outdoors	74.0	74.4	+
Swimming	61.3	66.1	+
Sightseeing	52.7	60.8	+
View/photograph wildlife	50.2	54.1	+
Picnicking	51.7	47.5	-
View or photograph birds	35.7	41.5	+
Boating	35.5	38.2	+
Bicycling	37.5	35.6	-
Fishing	34.2	35.0	+
Snow/ice activities	24.9	26.6	+
Developed camping	23.8	21.7	-
Primitive camping	14.5	12.4	-
<i>Data from 2005-2009 and 2010-2011 NSRE</i>			

Common Reasons for Participating in Outdoor Recreation

People who participate in outdoor recreation commonly say that they do so for health benefits, to spend time with family and friends, to get away from the demands of everyday life, to keep physically fit and to be close to nature and observe scenic beauty. (Outdoor Foundation, 2012).

The most recent nationwide outdoor recreation participation study is from Outdoor Foundation (2012). Highlights of that survey are listed below to provide national information. This survey is interesting because it shows emerging activities not accounted for in NSRE data, for example triathlons. The results from this 2012 national outdoor recreation participation study can also be compared to the Involved User study for reference.

National Demographics of Outdoor Recreation Participants:

- 66% 25 years of age or older
- 66% are married
- 55% travel one or more hours to participate in outdoor recreation
- 79% are employed in some manner
- 45% are from households with an income of \$75,000 or more
- Across age groups, more men participate in outdoor recreation than women
- Adults with kids in their household are slightly more likely to participate in outdoor recreation activities than those with no children

Table 21. Top 5 Popular and Favorite Outdoor Activities of Americans

Most Popular Youth Outdoor Activities By Participation Rate, Ages 6 Plus	Favorite Youth Outdoor Activities By Frequency of Participation, Ages 6 Plus
1. Running, Jogging and Trail Running 18% of Americans 51.5 million participants	1. Running, Jogging and Trail Running 85 average outings per runner 4.4 billion total outings
2. Fishing (Fresh, Salt and Fly) 16% of Americans 46.2 million participants	2. Bicycling (Road, Mountain and BMX) 56 average outings per cyclist 2.4 billion total outings
3. Bicycling (Road, Mountain and BMX) 15% of Americans 43.0 million participants	3. Birdwatching 39 average outings per birdwatcher 994 million total outings
4. Camping (Car, Backyard and RV) 15% of Americans 42.5 million participants	5. Fishing (Fresh, Salt and Fly) 18 average outings per fisher 839 million total outings
6. Hiking 12.0% of Americans 34.5 million participants	4. Hiking 16 average outings per hiker 538 million total outings

Figure 10. Outdoor Recreation Trends and Futures Summary

Outdoor Recreation Trends and Futures: A Technical Document Supporting the Forest Service 2010 RPA Assessment

Trends Identified in the National Survey on Recreation and the Environment (2010), H. Ken Cordell, Principal Investigator

1. What people now choose to do for outdoor recreation is very noticeably different from choices made by and available to previous generations of Americans. Some traditional activities are declining in popularity (e.g., fishing and hunting) while others are increasing (wildlife or bird watching and photography).
2. Overall growth between 2000 and 2009 in the number of people participating and in the number participation days of 60 activities (including 50 nature-based activities), even though some traditional activities are in decline.
3. Growth in the overall group of nature-based activities named “viewing and photographing nature” (including birds, other wildlife, fish, wildflowers, trees and scenery). Visiting recreation and historic sites and non-motor boating showed moderate growth in total activity days. Three of the other activity groups—hunting and fishing, backcountry activities, and motorized activities—ended up toward the end of this decade at about the same level of participation as in 2000, while various forms of skiing, including snowboarding, declined in total days.
4. Different segments of society chose different types and levels of participation in different mixes of outdoor activities.
 - We found that visiting recreation or historic sites was significantly higher among non-Hispanic Whites, late teenagers, middle-aged people, people with some college to completion of advanced degrees, higher income people, and the foreign born.
 - Viewing and photographing nature was higher among people with higher education, higher incomes, non-Hispanic Whites, people ages 35 to 54, those having some college to post graduate education, and those earning more than \$50,000 per year.

- For backcountry activities, participation was highest among males, Whites, Native Americans, people under 55 years, people well-educated with higher incomes, and rural residents.
 - Participation in hunting, fishing and motorized outdoor activities was higher among rural, non-Hispanic White males with middle-to-high incomes.
 - Non-motorized boating activities and skiing/snowboarding participation tended to be greater for younger, non-Hispanic White urban males with higher incomes and education levels.
5. America's youth do spend time outdoors, and that for some it is substantial. Some of that time is for outdoor recreation.
- 64 percent of youth ages 6 to 19 reported spending two or more hours outdoors on a typical weekday.
 - Over three-fourths reported two or more hours outdoors on typical weekend days.
 - One half of kids surveyed reported spending as much as four or more hours outdoors on a typical weekend day.
 - Less than five percent spent no time outdoors on either weekdays or weekend days.
 - Regarding time spent outdoors relative to last year, across the entire sample of both boys and girls, only 15 percent reported spending less time, 44 percent reported spending about the same time, and 41 percent estimated spending more time outdoors this year than last.
 - The youth outdoor activity with the highest participation rate was that of "just hanging out or playing outdoors."
 - The second highest participation activity, with 80 percent youth participation, was being physically active by participating in biking, jogging, walking, skate boarding, or similar activity.
 - Playing music or using other electronic devices outdoors was the third highest participation activity, followed by playing or practicing team sports and reading/studying outdoors.
 - The number of girls ages 6 to 15 years who hunt has nearly doubled between 1991 and 2006, and the number of boy hunters of that age stayed about level. However, as clearly shown by the national survey done by the Outdoor Foundation and the National Fishing, Hunting, and Wildlife-Associated Recreation surveys, the number of youth participating in the outdoor activities they track may be declining.
6. Public lands continue to be highly important for the recreation opportunities they offer.
- 69% of the population in the west are participating in visiting recreation and historic sites on public lands.
 - In the West, slightly more than 60 percent of viewing and photographing nature activity occurs on public land.
 - In both the East and West, around three-fourths of backcountry activity occurs on public lands.
 - In the West, 57 percent of hunting occurs on public forest lands.
 - The majority of cross-country skiing—67 percent of annual days in the West is

estimated to occur on public lands.

- From the National Fishing, Hunting, and Wildlife- Associated Recreation Survey - 39 percent of hunters used public lands, while 82 percent used privately owned lands.
- For wildlife watchers, publicly owned lands were the most popular destinations for observing, feeding, or photographing. Just 38 percent of wildlife watchers visited private areas. About 27 percent of trip-taking wildlife watchers visited both public and private land.

7. Visits to public lands

- Visits to various units of the National Park System have been relatively stable
- Visitation at National Wildlife Refuges and other areas managed by the U .S. Fish and Wildlife Service has shown fairly steady growth.
- Visitation at Bureau of Land Management areas has been relatively stable over the years.
- Visitation to national forests has been declining.
- State park visitation grew pretty steadily from 1992 up through 2000 then declined until 2005. Since 2005, State park visitation increased through 2008 before dipping again in 2009.

8. Based on a national study of constraints to participation

- Some segments of our society feel more constrained than others.
- For camping, the most important motivations are to be outdoors, to get away from the everyday demands of life, and to experience nature.
- For sightseeing, the most important motivations are to be with family, to be outdoors, and to get away from the everyday demands of life.
- For walking, the motivations are to be outdoors, to contribute to health, physical exercise, or training, and to get away from the demands of everyday life.

9. The five activities projected to grow fastest in per capita participation over the next 50 years are developed skiing (20 to 50 percent), undeveloped skiing (9 to 31 percent), challenge activities (6 to 18 percent increase), equestrian activities (3 to 19 percent), and motorized water activities (-3 to 15 percent).

The activities projected to decline in per capita adult participation rates include visiting primitive areas (-5 to 0 percent), motorized off-road activities (-18 to 0 percent), motorized snow activities (-11 to 2 percent), hunting (-31 to -22 percent), fishing (-10 to -3 percent), and floating activities (-11 to 3 percent). Growth of per capita participation rates for the remaining activities will either hover around zero or grow minimally.

Note: While activities currently having high participation levels may not show large percentage increases in participant numbers, even small percentage increases in already highly popular activities can mean quite large increases in participants.

Our projections for trends indicated that outdoor recreation choices will continue to grow and change in the future. Our changing demographics, lifestyles, reliance on digital technologies, economic fluctuations (e .g., from rapid growth in the 1990s to recession in the last half of the 2000s), changing landscape and natural land base, globalization, and many other changes will continue to drive changes in outdoor recreation. These changes

will be important for public lands, e .g., Federal lands and State parks.

Technology Factors

Technology has impacted outdoor recreation and modern lifestyles in a variety of ways. New types and styles of outdoor recreation activities and participation continue to emerge (Moore & Driver, 2005). Mountain biking for example is an increasingly popular land based recreation activity that did not exist prior to the 1970s (Moore & Driver, 2005). The Outdoor Industry Association (2012) calls bicycling (on a paved or unpaved surface & BMX) a gateway activity, in that those who participate are likely to participate in other outdoor activities as well. According to the 2012 Participation report, 15% of Americans age 6 and over participate in bicycling, while 2.4% of those are mountain bikers. Recreation activities such as mountain biking, motorized watercraft use, off-highway vehicle use (OHVs), snowmobiling, snowboarding, and geocaching are some recent technologically driven activities surfacing in natural resource settings. Technology has allowed gear to be created that allows more people to participate, to go farther and to stay longer than was previously possible (Moore and Driver 2005). Not only does technology create greater opportunities, but it also improves existing recreation experiences by making activities safer than before (Attarian, 2002).

Off-highway vehicle recreation (OHV) represents a form of recreation that has grown substantially in terms of participation and technological advancement. Earlier NSREs referred to “off-road” driving, whereas now, there are many forms of land-based motorized recreation that the term off-highway vehicle recreation is now more representative of the many forms of recreation activities taking place off of the pavement. Participation in OHV driving grew steadily and substantially between the 1994-1995 NSRE and the 2003 NSREs, which was when OHV use reached it’s peak with 51.6 million Americans age 16 and older participating. This time period was followed by decreases through 2007, when participation was 44.4 million. However 2009 data indicates that there has been a subsequent increase in participation to 46.2 million participants (Cordell et al., 2008). This growth alone, illustrates the relevance of considering technology’s effect on recreation activities and issues.

Advances in technology have increased the number of sedentary leisure activities individuals engage in, mostly in their own home, but increasingly out on the road as well (e.g., smart phones, tablets, portable DVD players, Wifi internet access, etc.)). (Cordell, 2004; Haworth & Veal, 2004; Larson, 2005; RoperASW, 2003). As researchers have pointed out, these sources of technology may compete with outdoor recreation for scarce leisure time hours (Pergams & Zaradic, 2006). The 2012 Outdoor Recreation Participation Report by the Outdoor Industry Association indicates that 13% of 6-12 year olds, and 16% of 13 to 17 year olds indicate that they don’t participate in outdoor recreation activities because they are too busy with other recreation activities. However, the most common reason why youth don’t participate in outdoor activities was a lack of interest (29% for 6-12 year olds and 45% for 13 to 17 year olds). For young adults, ages 18-24, the most common reason they don’t participate in outdoor recreation activities is due to lack of time (43%).

However, increasingly, people are using technology to search for outdoor recreation opportunities, and are also relying on technology while recreating to enhance their experience (Outdoor Industry Association, 2012). For instance, outdoor recreationists over the age of 45 are more likely to use a desktop to search for information about outdoor recreation (51%), while those ages 18-24 are more likely to use a laptop (66%). Recreationists ages 18 to 24 and 25 to 44 make up the two age groups most likely to use a smart phone (35% for each group), and those ages 25-44 are the age group most likely to use a tablet to access outdoor recreation information (13%). Given the variety of devices that are being used to access information, Parks and Recreation agencies may need to make sure that the information they are providing to the public is available in formats that will accommodate their use.

Technology and Management

With technological advances and emerging recreation activities, come the questions of how to manage these new and increasingly popular recreation activities and create protocols for new management standards. Again, using mountain biking as an example, questions surface over undesirable social and ecological impacts to recreation settings such as user conflict, crowding and resource degradation (Moore & Driver, 2005; White et al., 2006). OHV use is another activity of primary concern for managers due to the ability for these vehicles to cover large amounts of territory over a variety of terrain (Cordell et al., 2005a).

Shifting work schedules due to telecommuting and flexible work hours present new opportunities for the American working class to recreate more often. Increasing understandings of the links between physical exercise and health benefits of recreation also affects participation rates (Bedimo-Rung *et al.*, 2005; Henderson & Bialeschki, 2005). Many other philosophical questions remain about the social acceptability of technology in recreation settings, particularly wilderness settings (Attarian, 2002; Freimund & Borrie, 1997). As the technological realm continues to evolve, the effects of a technologically advanced society on recreation issues have yet to be fully understood.

TRENDS IN COLLABORATIVE PLANNING AND PARTNERSHIPS

By Nicole Armstrong-Best, Services and Programs Coordinator, Arizona State Parks

Three factors will continue to influence the need of parks and recreation agencies to focus on community engagement at all levels in the next five years. First, the fiscal recession has already placed extreme limits on local and state finances available for parks and recreation and seems poised to do the same at the Federal level. Second, there is an increased interest in the role of the social institutions that “operate outside the confines of the market and the state” – the non-profit or independent sector – in supporting parks and recreation. Third, we have the largest, most educated, and despite the recession, the most affluent and long-lived retiring generation ever. How this generation will change volunteerism trends and community engagement have been the focus of much research and debate over the last 10 years.

As funding has decreased, parks and recreation agencies have had to cut down on staffing and public programming. In order to even maintain these reduced standards, agencies now have to partner in many ways that were either not pursued in the past, or were considered as optional or additional programs to foster community support, but not essential to daily operations or public programming levels. Now partnering, whether with for-profit, non-profit or other government agencies is essential to continued operations.

When partnering with non-profits, parks and recreation managers will need to understand the dynamics of small versus large groups, and the personalities involved which greatly determine decision-making. In addition, the capabilities and capacities of these non-profits are related to how long they have been in existence and the sophistication of the members (as it relates to knowledge of non-profit management and fundraising). As we move down the continuum of networking through true collaboration, the roles and responsibilities of governmental staff, volunteer staff and non-profit members will need to be clearly defined and supported.

The Nonprofit Times 2012 Platform for the Nonprofit sector notes that the “federal government has been heaping, err, transferring, its programs onto the sector. They also note that the “nonprofit sector must be a central component of the nation’s economic recovery.” But how to best incorporate this support for parks and recreation agencies will need concerted thought and effort.

With the increased need for volunteer support, and the Baby Boomer generation retiring, parks and recreation managers know that engaging this group is essential for continued operations. However, this generation will not volunteer in the same way as previous generations. Boomers want to volunteer their time for projects that engage their skill sets – not on-going operations with repetitive tasks. They want to volunteer for shorter periods of time, and engage with multiple organizations that they feel a connection to, not stay with one agency for 20 years. In addition, writers such as Marc Freeman, feel that the extended retirement that longevity now affords cannot be sustained either personally or by society as a whole. As he puts it, “we’re looking at 30-year retirements in the era of the Great Recession....that is simply not going to work.” So Boomers may wish to engage with land managing organizations not only as volunteers, but as seasonal workers, paid or unpaid members of Friend’s groups and stipend workers (such as AmeriCorp or Encore Fellows). Outdoor recreation agencies and organizations need to be open and flexible enough to work with Boomers in these different ways.

What do all these issues lead us to – of course a need for more collaboration. But how to ensure timely, successful, consistent and sustained collaboration? Once agencies open their finances and daily management to outside forces, they also have to deal with issues of shared ownership, shared control, shared success and shared failure. This will necessitate a fundamental shift in the work that parks and recreations agencies engage in, at all levels. Staff will need to grow their skill sets to include facilitation, non-profit management, volunteer management, conflict resolution, collaborative strategic planning etc. Community supporters, whether volunteers, Friend’s group members, user group

members, or donors, also need to learn how to work through the sometimes complicated, usually slow, many times frustrating, labyrinth of government rules and regulations, while also acknowledging that this type of work is new to many of the parks and recreation staff that they need to work with. The next five years offer many opportunities to create a truly collaborative and sustainable model of support – but only if park and recreation professionals and supporters work strategically towards that goal.

OUTDOOR RECREATION AND THE ARIZONA OFFICE OF TOURISM

By Melissa Elkins, Research Manager, Dawn Melvin, Tribal Tourism Relations Manager, and Glenn Schlottman, Community Relations Manager, Arizona Office of Tourism

I. Arizona Travel Stats and stats specific to the Outdoor Visitor

A. Marketing the Outdoors to Visitors

1. Official State Visitors Guide
2. Official State Visitors Map
3. ArizonaGuide.com
4. Arizona Council for Enhancing Recreation and Tourism (ACERT)
5. Arizona Scenic Roads
6. Geo-tourism MapGuide
7. Other Partnerships
8. Co-Op Program
9. Visitor Information

B. Trends in Outdoor Recreation and Travel

1. National
2. Arizona

C. Opportunities

**(SEE SUPPLEMENTAL ATTACHMENT AT
AZSTATEPARKS.COM/SCORP FOR REVIEW)**

HISTORIC PRESERVATION AND OUTDOOR RECREATION IN ARIZONA

By Eric Vondy, Preservation Incentive Program Coordinator, State Historic Preservation Office

While outdoor recreation is normally associated with activities such as hiking, fishing, and camping, historic preservation also plays an important role. From walking tours of historic neighborhoods to visits to archaeological parks, historic preservation acts as an economic driver to spur cultural heritage tourism. This is particularly effective for driving tourism to rural Arizona.

Historic communities like Bisbee, Tombstone, and Seligman still exist because of cultural heritage tourism. Bisbee is one of several Arizona communities that have become arts centers by utilizing the unique character of their historic building stock to attract artists. Tombstone, on the other hand, survives and thrives due to its connection to

Arizona's Wild West past. Seligman continues to capitalize on its location on Historic Route 66. Other communities such as Cottonwood, Clifton, and Nogales are working to capture the cultural heritage traveler by using preservation to revitalize their aging downtowns.

All of these communities aid outdoor recreation by providing accommodations in their communities and giving people reasons to stay longer in their respective regions. Bisbee and Tombstone, for example, are located near an array of public lands that allow activities such as hiking in the Huachuca Mountains, birding at the San Pedro Riparian Preserve, fishing at Parker Canyon Lake or riding ATVs along the Ghost Town Trail.

National Parks

An examination of the parks and properties managed by the National Park Service in Arizona shows the importance of preservation. Eleven of the twenty-one national parks in Arizona are primarily historic parks.

Grand Canyon National Park is by far the most visited National Park in Arizona – receiving 4,243,024 visitors in 2011. The second most visited National Park, Glen Canyon National Recreation Area, had less than half the visitors that the Grand Canyon received. While the Grand Canyon is the primary draw for tourists, there are seven National Historic Landmarks: El Tovar Hotel, Grand Canyon Railroad Depot, Grand Canyon Lodge, Grand Canyon Park Operations Building, and the Grand Canyon Power House, and Grand Canyon Village with 257 contributing properties, as well as the buildings designed by Mary Colter, the famed architect (Desert View Watchtower, Hermit's Rest, Hopi House, and The Lookout). There are also nine individual properties, eight districts, one structure, and one archaeological site listed on the National Register of Historic Places located within the park. Many of these structures were built to enhance the park visitor's experience. The Desert Watchtower designed by Mary Jane Colter, for example, was completed in 1932 as a rest stop for sight seeing tours for the Fred Harvey Transportation Department, who had tour cars and busses that traveled from Grand Canyon Village 25 miles away.

More than 2 million people visited Arizona's historic National Parks last year. Canyon de Chelly National Monument is the 4th most visited National Park in the state. Last year more than 825,000 people visited its ruins. At one time reconstruction was the favored method of showcasing the structures in historic parks. Parks such as Tuzigoot National Monument and Montezuma Castle National Monument have significant portions that have been rebuilt. This technique is no longer considered appropriate, however, these reconstructions have taken on historic significance.

Most natural parks in the state also feature historic structures. Richard Neutra, one of the most prominent architects of the 20th Century, for example, built the visitor center at Petrified Forest National Monument. Also at Petrified Forest National Monument is the Painted Desert Inn, originally designed by National Park Service architect Lyle E. Bennett. This property was made a National Historic Landmark in 1987 and is now a museum and bookstore. These two properties are the focal points of Petrified Forest

National Monument. With most visitors to the park following a driving tour where they may or may not stop, get out of the car, and see the various sites, the visitor center and the Painted Desert Inn are the two places that nearly all tourists will visit.

With the addition of Fort Apache in March of this year, there are 42 National Historic Landmarks in Arizona. The diversity of these properties shows abundant opportunity for the outdoor recreationist. The San Bernardino Ranch, for example, offers opportunities for birding, and picnicking and it is next to the San Bernardino National Wildlife Refuge. Desert Laboratory near Tucson is a popular hiking destination. Hoover Dam is located on Lake Mead; the 3rd most visited National Park in the state. Tumacacori, an old Spanish mission, is linked to Tubac, an old Spanish presidio and State Park, by an historic trail that follows the Santa Cruz River.

State Parks

Nine of the 30 State Parks in the Arizona State Park system are historic parks. Several other parks have historic or prehistoric sites within them. Historic Parks are often focal points of the community. Fort Verde State Park is located within the heart of Camp Verde. Camp Verde has the opportunity to become a major outdoor destination due to its location with hundreds of miles of hiking, biking, and equestrian trails nearby as well it's location along the Verde River. However, no town planning of any significant size can be done without incorporating the State Park.

Just like National Parks, some recreation or conservation State Parks often have historic sites within their boundaries. Slide Rock State Park, one of Arizona State Park's most popular water parks, is named for it's unique water slide. It is located on the Pendley Homestead and many buildings associated with the homestead still exist and are still used. Oracle State Park has the Kannally Ranch House, a four level adobe home featuring Moorish and Mediterranean architectural influences, within it's boundaries. Inside the popular Catalina State Park is the Romero Ruin, which dates from the 6th century and was used for 400 years.

Another use of historic sites is as destinations or points of interest along trails. Boyce Thompson Arboretum, which was listed on the National Register of Historic Places in 1976 and contains several historic buildings in addition to the many plants, is near the Arizona Trail and is the end of a new hiking trail that winds through past the ghost town of Pinal, through the town of Superior, and up Queen Creek for several miles. The National Park Service and the Bureau of Land Management are working together to open sections of the Anza Trail - a trail, which follows the approximate course of Juan-Bautista de Anza, in 1775 when he walked from Tubac to a point near San Francisco, CA, for hikers. This trail will leave from Tubac Presidio State Park and likely pass through Yuma Territorial Prison State Historic Park.

The historic buildings at the historic parks and non-historic parks also serve as educational centers to enhance outdoor recreation. Tubac Presidio hosts Meet Our Wild Neighbors, a program featuring live animals from Arizona-Sonora Desert Museum that can be found in Sonoran Desert. Homolovi State Park features rock art tours, which

educate visitors about the kinds of rock art found in the area. Boyce Thompson Arboretum features several education events utilizing the historic properties of park including lizard identification and photography classes.

Other Public Lands

Other land management agencies also engage in preservation activities to increase outdoor recreation. The Bureau of Land Management, for example, has done significant work on the ghost town of Fairbank, which can serve as a starting point for hikes along a chain of abandoned mining and milling sites in Southern Arizona. Capitalizing on the OK Corral gunfight, a trail on BLM land has also been developed that goes to the Clanton Ranch, although interpretation of the site clearly states that there is little evidence that this site had anything to do with the Clanton Family. Near Sierra Vista is the Murray Spring Mammoth Kill Site. The BLM has developed a trail that leads through the 11,000-year-old site that contains numerous interpretive signs about Clovis man and the bones of the animals found here.

Local Identity and Economics

Many communities that utilize historic preservation are now developing outdoor recreation to enhance and prolong the visitor experience. For decades Tombstone has relied on the story of the OK Corral gunfight as its near sole method of economic growth. They have taken to creating buildings that conform more to the Hollywood Western than to reality. Some actual historic building facades have been covered by fake facades that conform more to the visitor's preconceived notions of what a Wild West town looked like based on decades of views Western movies. As the popularity of the Western and Wild West history continues to shrink, the town has had to find alternative means to sustain itself. In recent years, the old mine has been cleared and opened for tourism, and outdoor activities such as birding, hiking, horseback riding, and jeep tours have started to develop. While the primary focus of the town is still being a Wild West tourist destination, entrepreneurs are starting to see use these activities to keep visitors in the area longer.

Communities like Bisbee, Jerome, and Tubac use their historic structures to attract artists who in turn have converted these old and dying towns into artist communities and popular weekend getaway destinations. In these old pre-automobile built towns, parking can be problematic but the layout of the community is ideal for walking. While these communities seem to be ideal for hiking or other activities, they focus mostly on retail experience with local trails being reserved for evening hikes by residents.

Other communities such as Superior have been working on becoming a tourist destination. When Resolution Copper decided to reopen the mines in Superior several years ago, a major effort began to revitalize the town. While political changes and the current recession curtailed many of these efforts, the town did complete the trail mentioned above that winds from Boyce Thompson Arboretum State Park through the town itself and up Queen Creek itself. Prescott has spent years developing a trail system around and through the community.

Many other communities like Holbrook, Clifton, and Nogales are ripe for developing more outdoor recreational opportunities. With its rich ranching history and being located along a transportation corridor, Holbrook seems an ideal location for several types of outdoor activities. Clifton, on the other hand, is tied only to mining but much of the historic community located along Chase Creek seeks other avenues to grow the local economy. Clifton is located at the bottom of the Coronado Trail and has abundant open land around it. Nogales is primarily known as border town but there are many outdoor recreation opportunities located a short distance from the town such as Pena Blanca Lake, the Buenos Aries Wildlife Preserve, and Patagonia Lake State Park as well as many other places.

Ghost Towns

Ghost towns play an unusual role in preservation. While there are places like Goldfield near the Superstitions Mountains that are fake ghost towns designed to attract tourists there are also real ghost towns around the state like, Swansea and Ruby, which are frequented by visitors. Fairbank is a ghost town in Southern Arizona run by the Bureau of Land Management. It offers several restored buildings, has a school house staffed by volunteers, a historic cemetery accessed by trail, and is linked to other trails in the area that lead to the ruins of other historic and prehistoric sites. There is also the Ghost Town Trail, a dirt road that links the ghost towns of Pearce, Gleeson, and Courtland. For the most part, these towns are left to deteriorate as tourists drive the road that links them. While there are minimal facilities at these sites, there is enough traffic to keep several businesses operating along the route.

Trails

The Secretary of the Interior lists four treatments for historic properties: Reconstruction (literally rebuilding a property that no longer exists); restoration (returning a building to its appearance at a specific time); rehabilitation (taking a building and adapting it to a new use); and preservation (arresting the physical decline of a property). When trails are involved with historic preservation, there is usually a ruin of some kind that acts as a destination or waypoint for the trail. Usually, the treatment involved is preservation. For example, Santa Cruz de Terrente is a late 18th century Spanish fort that is now a series of melted adobe walls a couple of miles down a trail off a remote road in the Arizona desert. The treatment for the site is to preserve what remains of it while continuing archaeological excavations. Signs interpret the site explaining the history of the fort as well as explaining the kind of life the Spanish soldiers stationed their lead. A variety of hiking options are available from there for visitors wishing to go further. There are also sites like the historic Mayhew Lodge that burned in 1983. The Call of the Canyon Trail in Oak Creek winds past the remains of the lodge, which has been reclaimed by the forest.

Archaeological Sites

Aside from archaeological sites being a waypoint along a trail, they also have become focal points of parks. In Oro Valley and in Peoria there are parks in which archaeological sites have become central features. Elden Pueblo near Flagstaff is a somewhere similar

example. While it is not a feature in a park, one of its common uses is for local residents to take walks.

In various places around the state, petroglyphs are either features along or destinations of trails. At the beginning of one of the popular hikes at South Mountain are a series of petroglyphs protected by only a small fence. In other places archaeological sites are stopping points along the trail – whether they be the foundations to old houses, bedrock mortar sites, or melted adobe walls.

The Arizona Site Steward Program

The Arizona Site Steward Program is an organization of volunteers that are dedicated to protecting and preserving the cultural resources and heritage of Arizona. Governmental land managers of Arizona primarily sponsor the Program, with Site Stewards being selected, trained and certified by the State Historic Preservation Office and the Governor's Archaeology Advisory Commission. The chief objective of the Program is to report to the land managers any destruction or vandalism of prehistoric and historic archaeological and paleontological sites in Arizona through site monitoring. Stewards are also active in public education and outreach activities.

Purpose of the Site Steward Program

Site Stewards work toward the following goals:

1. To preserve prehistoric, historic and paleontological resources for the purposes of conservation, scientific study, and interpretation.
2. To increase public awareness of the significance and educational value of cultural resources and the damage done by artifact hunters.
3. To discourage site vandalism and the sale and trade of antiquities.
4. To support the adoption and enforcement of national, state, and local preservation laws and regulations.
5. To support and encourage high standards of cultural resource investigation throughout the state.
6. To promote better understanding and cooperation among agencies, organizations, and individuals concerned about the preservation of cultural resources.
7. To enhance the completeness of the statewide archaeological and paleontological inventory.

Historic Vehicle Routes

Many communities located along the old Route 66 are also using preservation. Winslow renovated its old Harvey House, the La Posada, and turned it into a resort. Seligman and Holbrook are preserving their historic hotels and retail shops to attract Route 66 tourists – many of whom come from Europe and Asia just to drive the Mother Road. Both communities were used as models for Radiator Springs in the Disney/Pixar movie *Cars*. Closer to the California border on Route 66, Oatman sells itself as a Wild West town

similar to Tombstone with semi-wild burros wandering the streets. The town is small and isolated but located in a scenic desert area.

There is also renewed interest in other historic roads in Arizona such as US Route 80, which runs through the Southern part of the state through such towns as Douglas, Bisbee, Benson, Tucson, Tempe, Phoenix, Gila Bend, and Yuma. A National Register nomination is being written for sites along US-80. While lacking the prestige of the Route 66, US-80 attracts people who drive old highway routes and frequent the sites associated with them. Tourist sites along US-80 lack the nostalgic flare of the gift shops in towns like Seligman offering instead less commercial sites like Cienega Creek Preserve, a 4,100 acre preserve that allows equestrian, hiking, and biking use, or Gillespie Dam, a dam completed in 1921 that acted as the original crossing point for US-80 on the Gila River until Gillespie Dam Bridge was built 6 years later.

Niche Tourism

Niche or specialty tourism has been a trend for some years. Many communities can use niche tourism as an economic driver. Dark tourism, for example, is focused on the unpleasant places. In Europe these could be places like Cold War prisons, WW2 concentration camps, or battlefields. In Arizona, sites like the Yuma Territorial Prison State Historic Park, the Oatman Massacre site, Wham Robbery Site or even a driving tour associated with trunk murderess Winnie Ruth Judd could be considered dark tourism.

There also websites devoted to more obscure tourism niches: abandoned highways, abandoned factories, ghost towns, historic bridges, historic schools, and many other areas. Social media sites like Twitter, Facebook, Instagram, and Flickr allow enthusiasts to gather and share sites they have found. On Flickr there are groups devoted sharing photos of abandoned highways, for example.

Geocaching also plays a role in preservation. It involves a kind of treasure hunt wherein someone hides a cache – often a logbook and maybe some kind toy or trinket – and posts its coordinates on a website. Using handheld GPS receivers, people then find the coordinates and hunt for the hidden stash. Caches can be hidden anywhere from a tree in the newest block in Anthem to the Butterfield stagecoach station at Dagoon Springs. Geocaching brings players to all sorts of far flung places they wouldn't normally go thus exposing them to historic and prehistoric sites across the state. A visit to a prominent geocaching website showed nearly 800 of geocaching sites in Arizona often hid in out of the way locations. One, for example, is hidden in the remains of a resort known as Verde Hot Spring that burned in 1962 that is currently accessible from a trailhead after a long drive down a dirt road along the Verde River.

By Robert Baldwin, Grants Coordinator, Arizona State Parks

The ASPB administers several state and federal grant programs that provide funds to eligible entities for nonmotorized trails, and off-highway vehicle recreation. The following grant programs are specifically for outdoor recreation purposes: the federal

Recreational Trails Program (RTP Nonmotorized) for trail maintenance projects, the federal Recreational Trails Program (RTP Motorized) for motorized trail development, the State Off-Highway Vehicle Recreation Fund (OHV) for motorized trail development and information.

In order to guide the distribution of these monies, Arizona is required to prepare a trail systems plan every five years that:

- 1) identifies on a statewide basis the general location and extent of significant trail routes, areas and complimentary facilities;
- 2) assesses the physical condition of the systems;
- 3) assesses usage of trails;
- 4) describes specific policies, standards and criteria to be followed in adopting, developing, operating and maintaining trails in the systems;
- 5) recommends to federal, state, regional, local and tribal agencies and to the private sector actions which will enhance the trail systems.

The surveys conducted for the Trails Plan consisted of:

- a random sample telephone and web survey of Arizona households
- a web survey of a targeted group of trail enthusiasts
- a web survey of Arizona State Parks website visitors
- a survey of a targeted group of Arizona land managers
- a field survey of off-highway vehicle users

The primary recommendations from this survey were:

Table 22. Trails Plan 2010 Nonmotorized Trail Recommendations

First Level Priority Nonmotorized Trail Recommendations
Maintain Existing Trails, Keep Trails in Good Condition
Protect Access to Trails/Acquire Land For Public Access
Second Level Priority Nonmotorized Trail Recommendations
Mitigate and Restore Damage to Areas Surrounding Trails
Enforce Existing Rules and Regulations
Provide and Install Trail Signs
Develop Support Facilities
Construct New Trails
Promote Coordinated Volunteerism
Third Level Priority Nonmotorized Trail Recommendations
Provide Educational Programs
Provide Maps and Trail Information
Promote Regional Planning and Interagency Coordination

TRAILS GRANT PROGRAMS

The Federal Highway Administration Recreational Trails Program (RTP)

In July 2012 Congress passed Moving Ahead for Progress in the 21st Century Act (MAP-21), Public Law 112-141. It reauthorizes the Recreational Trails Program through 2014 as a Federal-aid program codified in Federal statutes under section 206 of title 23, United States Code (23 U.S.C. 206). The program provides funds for all kinds of recreational trail uses, such as pedestrian uses (hiking, running, wheelchair use), bicycling, in-line skating, equestrian use, cross-country skiing, snow-mobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles. Funding will continue at the 2009 level through 2014. The Arizona apportionment for 2009 was approximately \$1.9 million. Arizona State Parks is the agency responsible for administering RTP funds in Arizona. Each state develops its own procedures to solicit projects from applicants, and to select projects for funding, in response to motorized recreational trail needs within the state. Forty-six and one half percent (46.5%) of Arizona's RTP funds are available for motorized trails projects, while another forty-six and one half percent is available for non-motorized trail purposes.

Projects range from development of recreational facilities to mitigation of damage caused by off-highway vehicles and education projects that promote safety and environmental/resource protection. From FY1993 to FY2012, over \$8 million has been awarded to motorized projects.

Nonmotorized Trails – Recreational Trails Program (RTP)

In 2001 State Parks developed a cutting edge trail maintenance program that provides state contracted trail crews directly to the land managers. Periodically (approximately every two years), State Park announces the opportunity for land managers to request a specific amount of funds (usually capped at \$40,000) to accomplish routine trail maintenance. The land manager is responsible for providing matching funds and appropriate environmental clearances. The crew is paid directly by State Park. This eliminates the cumbersome process involved with grants to the agencies. One drawback to the program is that new trail construction and support facilities development are not included.

In the summer of 2012 State Parks announced an opportunity for trail managers to apply for grants for all trail improvements and education projects eligible under the Recreational Trails Program. The grants are limited to \$100,000 so that more projects can be funded. Twenty-five project applications were submitted requesting over \$1.8 million.

Priorities identified in the 2010 Trails Plan for motorized trails were:

Table 23. Trails Plan 2010 Motorized Trail Recommendations

First Level Priority
Non-Motorized Trail Recommendations
Protect Access to Trails/Acquire Land for Public Access
Maintain and Renovate Existing Trails and Routes
Mitigate and Restore Damage to Areas Surrounding Trails, Routes and Areas
Establish Designated Motorized Trails, Routes and Areas
Second Level Priority
Non-Motorized Trail Recommendations
Increase On-the-Ground Management Presence and Law Enforcement
Provide and Install Trail/Route Signs
Provide Maps and Trail/Route Information
Provide Educational Programs
Third Level Priority
Non-Motorized Trail Recommendations
Develop Support Facilities
Promote Coordinated Volunteerism
Promote Comprehensive Planning and Interagency Coordination

State of Arizona Off-Highway Vehicle Recreation Fund

The Off-Highway Vehicle Recreation Fund (Fund) (A.R.S.§28-1176) has been in existence since 1991. The Arizona Legislature appropriated .55% of state's annual vehicle gas tax revenue to support the Fund. In 2009 new OHV legislation was enacted to provide more regulation of OHV usage and additional funds to support law enforcement and facility development. All vehicles weighing less than 1800 pounds and designed primarily for travel over unimproved terrain are required to display an indicia (sticker) distributed through the Department of Motor Vehicles. The \$25 cost of the sticker is added to the OHV Recreation Fund. State Parks receives 60% of the money in the Fund and the State Parks Board is required to examine applications for eligible projects and determine the amount of funding, if any, for each project. Approximately, \$1.7 million dollars is available annually for on-the-ground and education projects.

The Arizona Game and Fish Department gets thirty-five per cent (35%) of the monies in the Fund for informational and educational programs related to safety, the environment and responsible use with respect to off-highway vehicle recreation and law enforcement activities and for off-highway vehicle law enforcement. They are required to provide at least seven OHV law enforcement officers distributed around the state.

The State Land Department receives five per cent (5%) of the monies in the Fund to allow occupants of off-highway vehicles with an OHV decal to cross state trust land on existing roads, trails and designated routes. The State Land Department also used the monies for costs associated with off-highway vehicle use of lands within its jurisdiction, to mitigate damage to the land, for necessary environmental, historical and cultural

clearance or compliance activities and to fund enforcement of off-highway vehicle laws.

Since the inception of the Fund in 1991 more than \$15 million dollars has been distributed to over a hundred projects around Arizona. State Parks also uses the state OHV Recreation Fund to leverage federal funds that require a non-federal match.

Arizona Statewide OHV Program

Arizona State Parks has been designated to administer the funds available in Arizona for motorized trails projects and programs. State Parks works with the stakeholders to identify needs and develop programs to address those needs. The Statewide OHV Program provides funds for on-the-ground projects that meet the priority needs identified in the 2010 State Trails Plan; supports the OHV Ambassador Program that promotes responsible OHV recreation and resource stewardship; and coordinates safety, education, and law enforcement programs with the Arizona Game and Fish Department. The federal land managers in Arizona, Bureau of Land Management and Forest Service, have been the primary recipients of project funds. State Parks maintains intergovernmental agreements with both agencies to achieve the mutual goal of providing OHV recreation opportunities to Arizonans and visitors.

Off-Highway Vehicle Advisory Group (OHVAG)

The Arizona State Parks Board established the Off-Highway Vehicle Advisory Group to advise them on the development and implementation of the Statewide OHV Program. It is a body of dedicated citizen volunteers who provide a voice for the public in the OHV Program. The OHVAG consists of seven members with no more than two members residing in one county; five members must be OHV recreationists affiliated with an organized OHV group; one member represent the general public or casual OHV recreationist; and one member represents a sportsmen's group. They can serve up to two three-year terms.

OHV Recreation Opportunity

The land managers that provide for and manage the most OHV opportunities in Arizona are the Bureau of Land Management (BLM) and the U.S. Forest Service (USFS), which collectively control over 22 million surface acres of the State's land. Many areas on these lands are open to cross-country travel which can cause environmental and cultural impacts and continued proliferation of unauthorized routes. The BLM and the Forest Service are inventorying and/or evaluating motorized routes and areas to designate acceptable locations for OHV recreation. Evaluation is the beginning step in identifying major OHV corridors for use by motorized vehicles.

Arizona State Land Department State Trust Lands also receive high OHV use. The ASLD is not mandated by law or funded to manage recreation on State Trust Lands. However, recreational permits are available to the motorized recreationists to cross State Trust Lands temporarily on open, existing routes. Vehicles with the state OHV decal do not need the permit.

County parks and preserves provide limited opportunity for motorized recreation. Few counties and cities offer OHV recreation staging area(s) that are often a gateway to BLM and Forest Service managed land. Pima County oversees the management of an OHV park to provide needed OHV recreation sites near urban centers. Management of the Park has gone through many challenges. Some counties are also completing trails and open space planning which should include strategies to address motorized recreation. Other governmental entities do not provide or only provide very limited opportunities for motorized recreation. Identification of motorized parks by local planners near population centers would help alleviate OHV recreational issues on private, state, federal, and tribal lands.

Motorized Recreation Management in Arizona

Off-Highway Vehicle (OHV) Recreation, once termed Off-Road Vehicle Recreation, is undoubtedly the most controversial and least understood recreation occurring on lands in Arizona today. It is an emotional battle for the users and a concern for land managers. OHVs represent a diverse body of motor vehicles that are capable of traveling over unimproved terrains such as full size four-wheel drive vehicles, trials and dual-sport motorcycles, sandrails, all-terrain vehicles, rock crawlers, and snowmobiles. People may use an OHV to access a particular destination (remote camping) or as the essential part of the recreation experience (dirt biking). There are increasing numbers of OHV users, impacts, and a need for management response in Arizona.

Based on the *Arizona Trails 2010 Plan*, OHV users represent almost 22% of the Arizona population which include residents who use motorized vehicle on trails for multiple purposes. Of that, 11% of Arizona residents reported that motorized trail use accounted for the majority of their time and are considered 'core users'. These users have increased from 7% as identified in the *Arizona Trails 2005 Plan*. In July 2006 the Arizona Motor Vehicle Division reported that approximately 230,000 all-terrain vehicles and cycles were titled or registered in Arizona. OHV decal sales for calendar year 2011 indicate that 481,823 vehicles under 1800 pounds were registered. These figures do not include untitled OHVs, out of state visitors, or other OHVs that recreate in Arizona. OHV recreation is one of the most extensive recreational activities taking place on public and state lands in Arizona and is forecasted to continue to grow at an increasingly rapid rate.

Benefits of OHV recreation include a significant economic impact in Arizona (more than \$4 billion a year based on a *2003 Arizona State Parks study), access for people with disabilities, and the benefits of outdoor recreation (e.g., family fun, stress relief, outdoor adventure). Concerns of OHV impact include factors such as environmental and habitat damage, cultural site damage, safety issues, sound pollution, air pollution/dust particulates, conflict with other users, visual impacts, noxious weeds, damage to livestock, traffic control, and proliferation of trails.

Specific issues in Arizona include:

- Lack of suitable riding areas near large urban centers to provide OHV recreation opportunity.

- Lack of an interdisciplinary group to technically encourage and aid local planners.
- Lack of on-the-ground management presence and self-policing for safety, information, education, and enforcement activities.
- Raids on OHV funds prevent steady, reliable, adequate funding to manage OHV recreation planning, maintenance, enforcement, and other OHV related activities.
- Inconsistency of rules and regulations including signing across jurisdictional boundaries.
- Lack of industry involvement to educate OHV users on specific Arizona rules, regulations, trail etiquette, and places to ride.
- Lack of user knowledge on where he or she can responsibly recreate using an OHV.
- Failure of the land managing agencies to adequately identify and define OHV trails and use areas.
- Development encroachment on public lands causing reduction of recreation access.

* This survey has not been updated and OHV use has increased dramatically.

Forest Service Travel Management and Planning

The new Forest Service Travel Management Rule (TMR), published in 2005, requires each national forest or ranger district to designate roads, trails, and areas open to motor vehicles within a four-year timeframe. It acknowledges motorized recreation as an appropriate recreation under proper management and provides a definition for OHVs. Implementation of the rule will generally restrict open cross-country travel. The Forest Service rulemaking does not affect snowmobiles and cross-country restriction of snowmobiles is left to the discretion of the local manager. It includes travel planning for big game retrieval and dispersed camping. A wide range of elements are included in the travel analysis and motorized route/area designation process including environmental, social, and cultural analysis; public involvement; and coordination with other agencies and tribal governments. Motorized route/area designations will be identified on a motor vehicle use map (MVUM) (36 CFR 212.56) which must be published by the year 2009. Most forests have not completed this step yet in 2012. Once the map is published, motor vehicle use inconsistent with designations is prohibited (36 CFR 261.13). Until designation is complete current rules and authorities will remain in place. In Arizona, there are 6 National Forests and 25 Ranger Districts which cover over 10 million surface acres and over 30,000 miles of routes. Each Forest may use a different process for reaching motorized route/area designations. Analysis and public comment will occur in different phases on each ranger district for some of the National Forests.

All six National Forests in Arizona are also currently in the process of forest plan revision. Forest Plans provide a broad long-term strategy for guiding natural resources and land use activities on the Forest, including motorized recreation. It will set the vision and direction for the future. Plans are being revised as some are near 20-years old and may not address current issues. The Plan does not address specific actions or projects, but are important in identifying the general suitability of motorized recreation across each Forest.

The Forest Service is also considering how to proceed with inventoried roadless areas. In January 2001, the United State Department of Agriculture (U.S.D.A) Forest Service issued The Roadless Area Conservation Rule (36 CFR 294). Within roadless areas, road construction and logging is prohibited. There are approximately 1.1 million acres of inventoried roadless areas in Arizona. In 2005, the national Rule was repealed and replaced with a State Petitions Rule that required governors of each State to petition the USDA for establishment of management requirements for roadless areas within their States. The Arizona Game and Fish Department was directed to lead the petitioning effort in Arizona. In September 2006, a U.S. Federal District Court of California reinstated the Roadless Rule and the State Petition Rule was suspended.

Bureau of Land Management Travel Management and Planning

The BLM set a comprehensive approach to travel planning and management, and for managing motorized recreational use activities in the “National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands” (2001) and “The BLM’s Priorities for Recreation and Visitor Services” workplan (2003). Arizona BLM is in the process of establishing a designated travel network through its land use planning efforts.

Arizona BLM is developing Resource Management Plans (RMP) for its various units, known as field offices. The plans often take 3 to 5 years to develop and generally cover the entire field office. There are currently 4 districts, 8 field offices, 5 National Monuments, and 3 National Conservation Areas which cover over 12 million surface acres and approximately 25,000 miles of primitive roads and trails on BLM managed land in Arizona. The purpose of the RMP is to allocate resources for certain uses (grazing allotments, recreational areas). As part of the RMP, under 43 CFR 8340, BLM offices are required to allocate the entire planning area into 3 area subdivisions: open (travel permitted anywhere), closed (e.g., wilderness areas), and limited (e.g., limited to existing or designated roads/trails, limited to seasonal use, limited to certain vehicular use). The RMP will also define “desired future conditions” of the planning area transportation network. During the RMP process the BLM conducts route inventory within the planning area and the public is given a period to comment, usually 90 days. The RMP Record of Decision (ROD) is signed, which implements the Plan. The life of the Plan is generally 15 to 20 years. Implementation plans, or Travel Management Plan development, will tier off the RMP to accomplish specific route designations; establish routes as roads, primitive roads, or trails; and establish monitoring protocols, mitigative procedures, and a maintenance schedule. A standard signing protocol, statewide route numbering system, and map format (known as “Arizona Access Guides”), will be established.

Arizona State Land Department, State Trust Lands – OHV Use

The Arizona State Land Department (ASLD), which manages over 9 million surface acres of State Trust Land, which accounts for approximately 13% of land ownership in Arizona, also receives high OHV use. State Trust Lands are scattered throughout the State, and the majority are located in more rural areas. State Trust Lands are not public

lands, but are instead a trust created to earn funds for trust beneficiaries, mainly Arizona's public educational institutions. Recreational permits are available to the motorized recreationist to cross State Trust Lands on open, existing routes. Federal land managers frequently inventory routes on State Trust Land sections that are checker-boarded between their land management jurisdictions. This assists in motorized route connections and consistency across jurisdictional boundaries. Through a partnership with OHV stakeholders, two areas surrounding Phoenix Metropolitan were signed, mapped, temporary available for motorized recreation on existing routes. These areas help alleviate the pressure on public lands while providing the public recreation opportunity near population centers. One of the areas has been closed. Additional collaboration between multiple entities to provide such opportunities benefits many OHV stakeholders, however, it does not financially benefit trust beneficiaries.

BOATING RECREATION IN ARIZONA

Originally written by Danielle Silvas, SLIF Grants Coordinator, Arizona State Parks

When it comes to water-based recreation opportunities in Arizona, there is an abundance of choices. Arizona has a variety of rivers, natural lakes and reservoirs that provide people with ample possibilities to boat, swim, water ski, and fish. Water-based recreation is an extremely popular and important aspect of Arizona's lifestyle. (see Figure 8. Arizona Boatable Lakes and Streams, back of plan).

Boaters that use Arizona waterways have many recreational opportunities in some of the most scenic landscapes. There are many boatable recreation lakes in Arizona that provide enjoyment for residents and visitors alike (see Figure x. Arizona Lakes and Rivers). For the purpose of this report, the state can be divided up into four water-based recreation regions; Colorado River, Northern, Southern, and Central.

- The Colorado River is the largest and most popular waterway, running along the north Utah boarder down the west side of Arizona from Nevada to California and exiting the state at the Mexico border. With more than 500 miles and an estimated 340,000 surface acres of fresh water, the Colorado River is the hot spot for recreation and six major lakes. Lake Powell, Lake Mead, Lake Mohave, Lake Havasu, Parker Strip, and Martinez Lake all offer accessible launch ramps, courtesy docks, fuel stations, camping with and without hook-ups, picnicking, fishing, fishing and boating supplies, boat rentals and much more. While many Arizonans use the river, many Californians also use this water resource.
- The Northern Region includes many lakes in the Coconino National Forest such as Upper Lake Mary, Apache-Sitgreaves National Forest with Luna Lake and Willow Springs, White Mountain Apache Indian Reservation with Big Lake and Reservation Lake, Arizona State Parks with Lyman Lake and Fool Hollow Lake, and Clear Creek Reservoir in Navajo County.
- The Central Region consists of waterways primarily run by the Tonto National Forest such as Roosevelt Lake, Apache Lake, Canyon Lake and Saguaro Lake on the Salt River, and Horseshoe Lake and Bartlett Lake on the Verde River.

Arizona State Parks manages Alamo Lake, and Lake Pleasant is run by Maricopa County Parks and Recreation.

- The Southern Region includes San Carlos Lake is run by the San Carlos Apache Tribe, Patagonia Lake and Roper Lake are Arizona State Parks, and the Coronado National Forest has the popular Parker Canyon Lake and Peña Blanca Lake.

Arizona's Northern, Central, and Southern Region lakes and reservoirs are much more remote than the Colorado River. Because they are inland these lakes and reservoirs are very popular for fishing, camping, boating, picnicking, and enjoying the great outdoors primarily for Arizonans.

Arizona Watercraft Survey

The Arizona Department of Transportation (ADOT), the Arizona Game & Fish Department (AGFD), and the Arizona State Parks Board (ASPB) are required, under Arizona Revised Statutes (Sec. §28-5926), to conduct a study every three years on watercraft fuel consumption and recreational watercraft usage. The primary purposes of this study are to determine the percentage of total state taxes paid to Arizona for motor vehicle fuel that is used for propelling watercraft and determine the number of days of recreational watercraft use in each of the state's counties by boat use days and person use days (BRC, 2006).

The fuel consumption data is collected to determine the allocation of motor vehicle fuel tax to the State Lake Improvement Fund (SLIF). The information on recreational watercraft usage patterns on Arizona's lakes and rivers is necessary, in part, to determine the distribution of SLIF funds to eligible grant applicants.

This study also provides selected attitudinal and behavioral data on;

- Water-based and non-water-based recreational activities participated in,
- Boating and water-based recreational facility needs,
- SLIF fund utilization priorities,
- Adequacy and focus of watercraft law enforcement activities; and
- Attitudes about selected watercraft and outdoor recreation issues.

The information contained in this report is based on two key study components:

- A statistically valid and projectable telephone survey of registered watercraft owners in Arizona, California, Nevada and Utah.
- An audit/survey of the fuel sales and consumption patterns of: (1) marinas; (2) public agencies, and (3) concessionaires, commercial boat operators and excursion operators.

Between March 1, 2011 and February 29, 2012, a total of 2,667,803,481 gallons of taxable gasoline was sold in Arizona. An estimated 28,153,984 gallons of gasoline was used to propel watercraft in the state of Arizona. This total represents 1.0553% of the total gallons of taxable gasoline sold during the study. The 2012 SLIF allocation of 1.0553 is up from the 2009 percentage of 1.0105. Within the sampling timeframe, 13%

of registered watercraft owners in Arizona, California, Nevada and Utah used their boats in Arizona during a given 30 day period, and 42.5% used their boat on an Arizona waterway during the last year, which is an increase when compared to 38.8% in 2009.

Total boat use days in 2012 were 2,874,866, a 13% decrease over the 3,301,629 boat use days recorded in 2009. Similar to the prior four studies, Mohave County is the dominant boating location in Arizona with 50.5% of total boat use days – up from 46.3% in 2009. The study also reveals increased boat use in Maricopa County, and decreased boat use in La Paz County.

Person use days also decreased from 15,941,792 in 2009 to 13,406,815 in 2012 – a 15% decrease. As in the case with boat use days, Mohave County is the dominant boating location in Arizona accounting for 52.7% of all person use days. Arizonans now account for the largest share of person use days – 52.8% (up from 46.7% in 2009), whereas prior to 2009, Californians had accounted for the largest share of person use days due to larger boating parties, a trend which has not continued since 2009.

Survey Questions

- When boaters are asked if they feel the program's funds should be used mostly for renovations or new building, a majority of boaters select renovations over new building – 55% vs. 31%.
- Boaters are asked how important they feel each of six SLIF funding functions are, four of the functions are rated very or somewhat important by eight out of ten boaters, or more: 1) the construction of recreation support facilities (e.g., restrooms, campgrounds and picnic tables) - 88%; 2) the construction of water-based boating facilities such as marinas, launch ramps and piers - 82%; 3) the construction of first-aid stations and other safety facilities – 81%; and 4) the purchasing of law enforcement and safety equipment such as patrol boats, radios and lights – 79%. These ratings are down slightly from the prior studies. These four priorities remained at the top of the importance list over the past four studies.
- A question was asked to determine boaters' single favorite boating activities. Eleven different boating activities were evaluated, the top three activities were: 1) fishing - 27%; 2) general pleasure boating – 26%; and 3) water skiing - 18%. Stopping people who are boating while drunk - 48% and stopping people who are boating recklessly - 44% - continue to be the two law enforcement activities which boaters would most like to see increased at their favorite lake or river.

WILDLIFE RELATED RECREATION IN ARIZONA

Updated by Jimmy Simmons, Off-Highway Vehicle Program Manager, Arizona Game and Fish Department

Introduction

Arizona is gifted with varied habitats that support a great diversity of wildlife as well as a significant amount of state and federal lands. As a result of this abundant and diverse

wildlife and the large amount of public lands, hunting, fishing, and wildlife viewing is an important outdoor recreation for many resident and non-resident sportsmen.

Arizona has a long tradition of providing recreational opportunities for the hunting and angling public along with supporting several other types of wildlife recreation. We strive to maintain and enhance programs for conservation of wildlife resources, and for hunters, anglers, wildlife watchers, photographers and other recreational users of wildlife and for all of those who take pleasure in enjoying that wildlife exists. The funding for this management is acquired through fees charged to hunters, anglers and trappers for licenses, permits, stamps and tags, and a federal excise tax on hunting and fishing equipment.

The purpose of Game Management is to protect and manage game populations and their habitats to maintain the natural diversity of Arizona, and to provide wildlife-oriented recreation opportunities for present and future generations. This includes big game, small game, fur-bearing animals, predatory animals, upland game birds and migratory game birds. Providing habitat for game animals also directly provides habitat for all wildlife in that habitat, which provides opportunities for all recreational users of wildlife.

The purpose of the Sportfish Management is to protect and manage sportfish populations and their habitats, while also working to maintain the natural diversity of Arizona. Sportfish management also provides fishing opportunities for present and future generations. “Sportfish” means fish that are pursued by anglers, including cold-water fish (such as trout) and warm-water fish (such as largemouth bass).

Management of Hunting and Fishing Recreation in Arizona

The activities of hunting and fishing are resource dependent, meaning that the harvest or take of wildlife and fish needs to be regulated to protect against over-harvest. This can be accomplished in a number of ways: limiting the number of licenses or tags that are sold, setting limits on the number of animals or fish that can be harvested within a set time period (i.e. 1 deer per year, 10 bluegill per day, etc.). This setting of limits also helps to allow the greatest number of individuals possible to enjoy the activity.

The regulations and guidelines that govern the pursuits of hunting and fishing are established and enforced by the Arizona Game & Fish Department (Department). The Department is part of the executive branch of Arizona state government. State law mandates that the Department protect Arizona’s wildlife resources, regulate watercraft use and enforce OHV laws. They do this by implementing rules and policies; developing cooperative partnerships; taking actions to conserve, manage and enjoy wildlife; and enforcing laws that protect wildlife, public health and safety.

Economic Importance of Hunting and Fishing in Arizona

Fishing and hunting recreation generates spending that has a powerful effect on Arizona’s economy. In 2001, more than 255,000 anglers spend an estimated \$831.5 million on equipment and trip-related expenditures annually. Hunters, more than 135,000 of them, account for an additional \$126.5 million in retail sales. This combined \$958 million in

spending creates an economic impact of \$1.34 billion to the state of Arizona. Furthermore, this spending supports more than 17,000 jobs, provides residents with \$314 million in salary and wages and generates more than \$58 million in state tax revenue.

The following report prepared by Arizona State University, School of Management (2002) presents a detailed economic analysis on the impacts that fishing and hunting recreation generate at the state and individual county levels.

Economic Importance for Non-consumptive Wildlife-Related Recreation in Arizona

Expenditures made by watchable wildlife recreationists generate rounds of additional spending through the economy. This results in numerous direct, indirect, and induced impacts. The sum of these impacts is the total economic impact resulting from the original expenditures. These economic figures show the total economic effect from 2001 watchable wildlife activities in Arizona to be \$1.5 billion. In addition, watchable wildlife recreation supports over 15,000 jobs in the state, providing total household income near \$430 million and generates over \$57 million in state taxes.

The following report prepared by Southwick Associates (2001), using data provided in the National Survey of Fishing, Hunting and Wildlife-Associated Recreation, presents a detailed economic analysis on the impacts that watchable wildlife recreation generate at the state and individual county levels.

Issues Affecting Hunting and Fishing Recreation

Arizona's remains the 8th fastest growing state in the U.S., with a population of 6.4 million in 2011. A growing human population places increasing demands on wildlife populations, in part because of shrinking wildlife habitat due to human development. Increasing human population and decreasing wildlife habitat also result in loss of areas in which to recreate, concentrate human activity in existing recreation areas, increase human-wildlife conflicts, increase density of watercraft and off-highway vehicles, and may reduce the quality of habitat available for wildlife as a result of these competing uses.

Arizona's increasing human population is more urban and less rural. Perceptions among residents regarding traditional uses of wildlife differ. The proportion of people who hunt and fish is declining, although the absolute number of participants in these activities is relatively stable. Assessing the desires of Arizona's diverse human population is essential to implementing appropriate management direction.

The increasing use of recreational vehicles like watercraft and off-highway vehicles often results in conflicts among user groups and requires balance between recreational management and protection of wildlife and wildlife habitat. Compliance with regulations becomes a greater challenge as recreational participants increase and often compete for limited space and resources. Increased emphasis must be placed on human safety, not only in recreational situations, but also in human-wildlife conflicts in both rural and urban areas.

Educational efforts must address all Arizonans and target diverse user groups to provide the necessary information to ensure compliance, reduce conflicts among users and with wildlife, and encourage sustainable enjoyment of Arizona's diverse wildlife resources.

The demand for access to public and State Trust lands for recreation has increased. About 18% of Arizona is privately owned and these lands can provide recreational opportunities and access into public and State Trust lands. However, as more Arizona landowners exercise their right to deny access to or through their private lands, access to public and State Trust lands has become difficult. Many times, collaboration with private landowners results in improved wildlife habitat in exchange for short-term or perpetual access agreements. These efforts must continue to address the underlying reasons for denial of public access, such as vandalism, trespassing, littering, illegal off-road activities, disruption of landowner operations, liability, undocumented immigrants and drug trafficking.

Participation - Hunting

Providing an accurate account of participation of hunting and fishing in Arizona can be difficult in some situations. For example determining the number of people interested in fishing or small game hunting (i.e. quail, dove, rabbit) is relatively easy. Any person wishing to participate in that activity must purchase a hunting or fishing license. However, in the case of big game hunting (elk, bighorn sheep, deer) these licenses or tags are distributed via a lottery draw. Meaning, that the numbers of people who wish to participate far exceed those that participate because of the need to regulate the number of animals harvested. For example in 2011 there were 8315 applicants (people wishing to participate) for only 99 Bighorn sheep tags (people who actually participated). This example is true every year for most big game hunts.

Table 24. Summary of Big Game Hunt Applicants and Permits Issued

Year	Species	# of applicants	# of permits issued
2011	Elk	80,191	24,636
2011	Bighorn Sheep	8,315	99
2011	Deer	69,657	47,678
2011	Pronghorn Antelope	19,115	830

Table 25. Summary of Small Game Hunter Participation

Year	Species	Hunters	Hunter Days	Days/Hunter
2010	Mourning Dove	40,500	145,300	3.6
2010	White-winged Dove	17,400	52,400	3.0
2010	Quail	33,150	162,737	12.7
2010	Cottontail Rabbit	10,532	67,220	6.4
2010	Squirrel	6,227	25,734	4.1

As Arizona's population continues to grow the participation in certain aspects of hunting and fishing has grown the same. The following table demonstrates the increase in participation in these activities:

Table 26. Trend in Select Big Game Applications

Species	Year	# of Applicants	Year	# of Applicants
Bighorn sheep	1965	573	2011	8,315
Spring Turkey	1979	6275	2011	13,160
Pronghorn Antelope	1966	6,781	2011	19,115
Elk	1966	7,811	2011	8

While the interest in participating in big game hunting has generally increased. The same is not been seen with interest in small game hunting. The following table illustrates this:

Table 27. Trend in Number of Small Game Hunters

Species	Year	# of Hunters	Year	# of Hunters
Mourning Dove	1995	52,357	2011	40,500
White-Winged Dove	1995	27,429	2011	17,400
Quail	1995	68,661	2011	33,150
Cotton-tail Rabbit	1995	20,941	2011	10,532
Squirrel	1995	15,955	2011	6,227

Demographics of Arizona Hunters

In April 2004 the Arizona Game & Fish Department sent a randomly selected sample of 2,000 purchasers of 2003 hunting licenses a demographics and satisfaction survey. The survey was designed to collect data that could be used for trend comparison with data collected during similar surveys in 1987, 1994 and 2000. All surveys included residents and non-residents in proportion to their occurrence in the hunting population. Arizona population statistics were taken from the Arizona Department of Economic Security's Internet website: www.azdes.gov, 2006).

Sales of Arizona hunting licenses reached a high in 1986. The Department was offering double deer tags during this period. After 1986, hunting license sales declined until a low was reached in 1992. Several factors may have contributed to this decline: poor deer and quail hunting, application deadline for the draw shortened by a week, archery javelina was added to the draw, and an increase in the cost of hunting licenses in 1990. From 1992 to 1993, hunting license sales jumped 12.4% (Figure 13). Small game hunters appear to be responsible for much of this increase, as their numbers increased by approximately 11,300 (13.6%), based on the annual small game hunter questionnaire.

The number of applications submitted in drawings increased by 5.7% in 1993, indicating that the number of hunters who bought licenses to hunt big game probably increased as well. Arizona hunting license sales increased from 1993-1999 with a slight drop in 1996 and 1997. This drop may have been a response to poor hunting conditions for all species, especially deer, quail, and dove. In 1998, deer was added to the bonus point system allowing unsuccessful deer applicants in 1999 to begin accumulating points. This may have reversed the slight drop in hunting license sales in 1996 and 1997. From 2000 to present, the Department has seen a 9.5% decrease in license sales. Population levels for many species, both big game and small game, are record low levels, which may be a factor in this decline.

Figure 11. Arizona Hunting License Sales

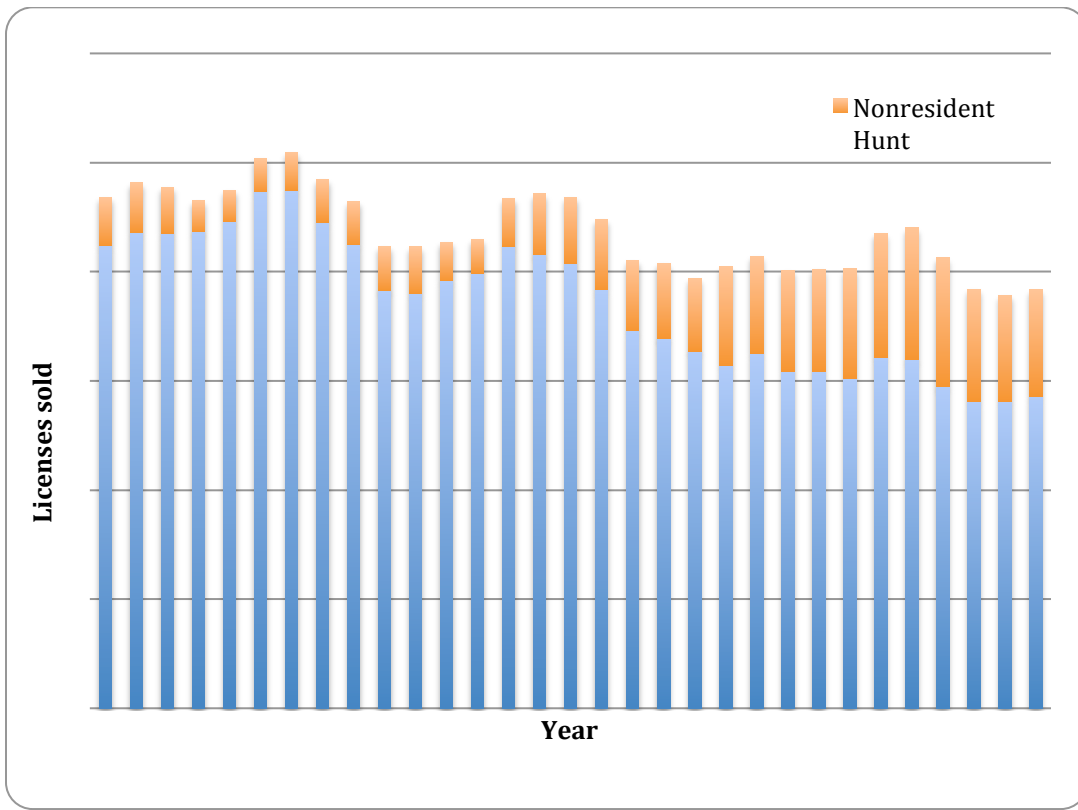


Figure 12. Percent of Arizona Residents who Hunt

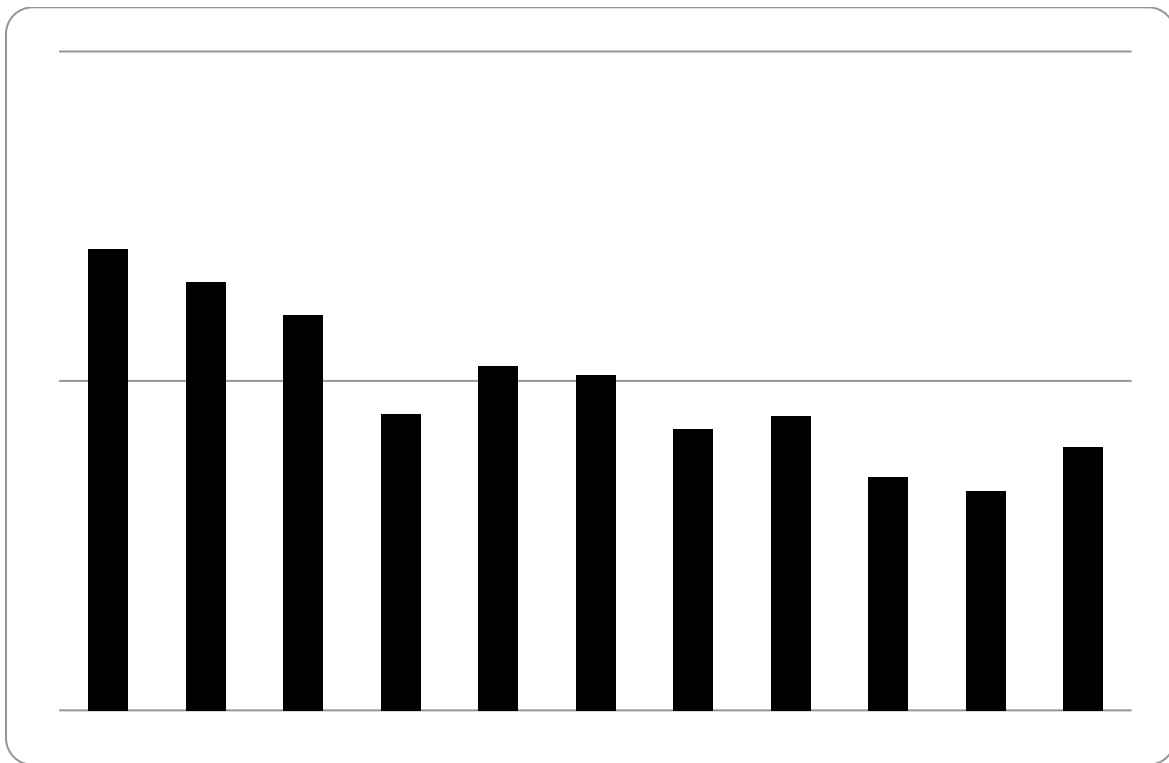


Figure 13. Non-Resident and Other License Sales

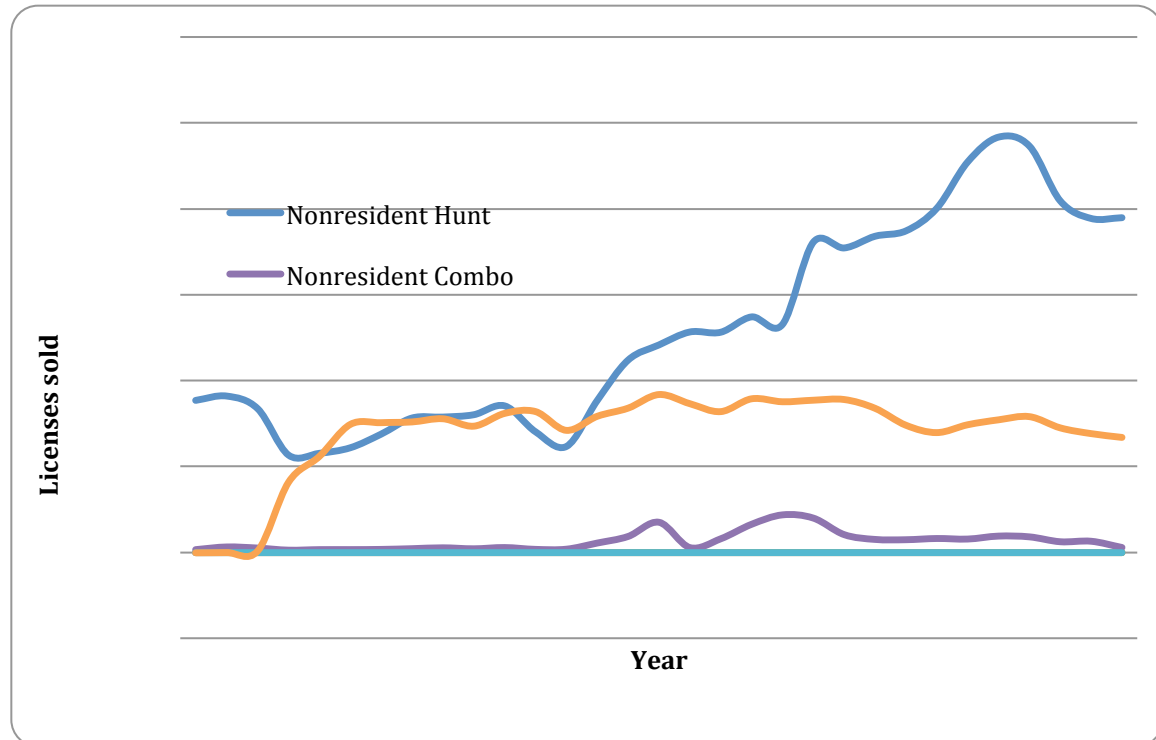
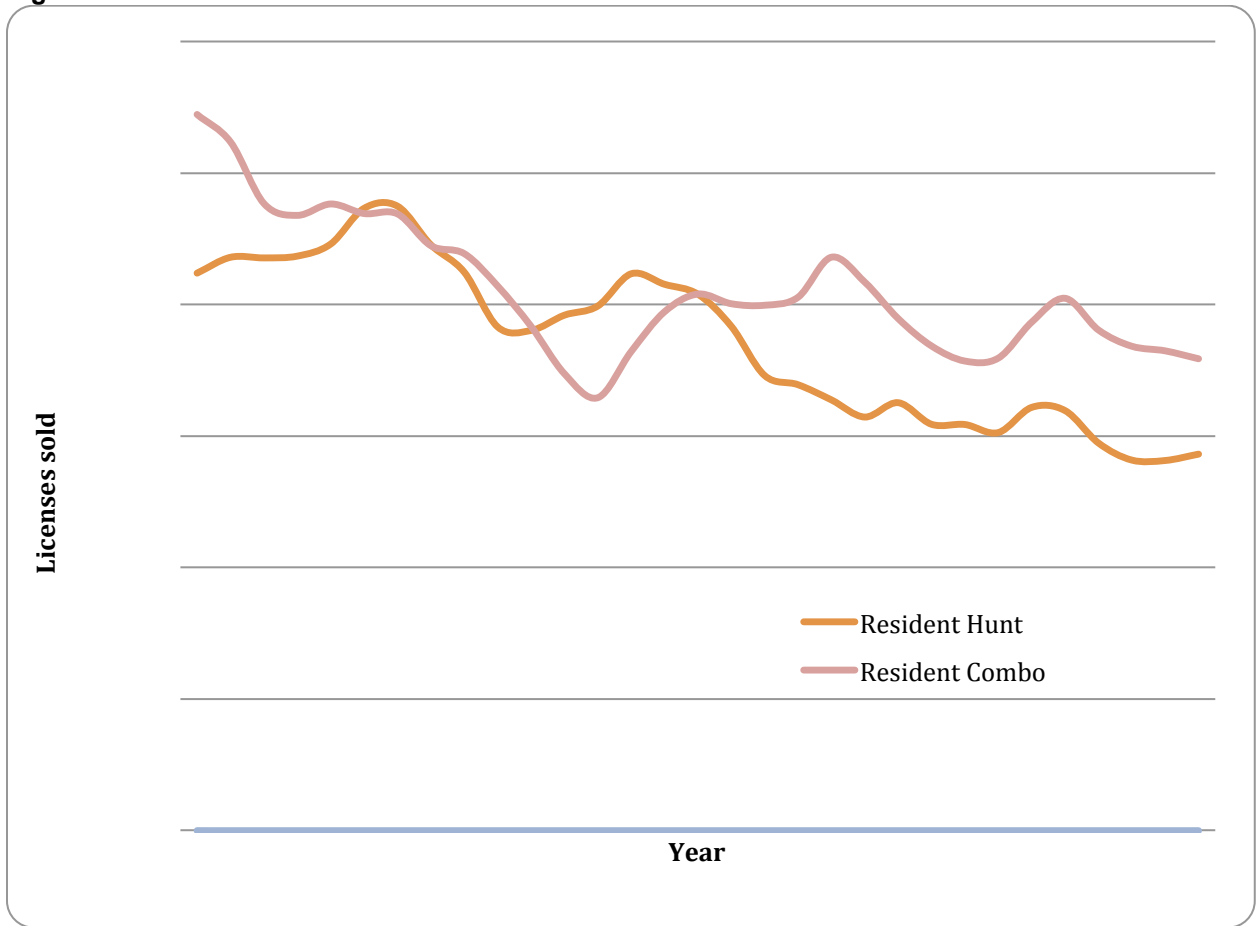
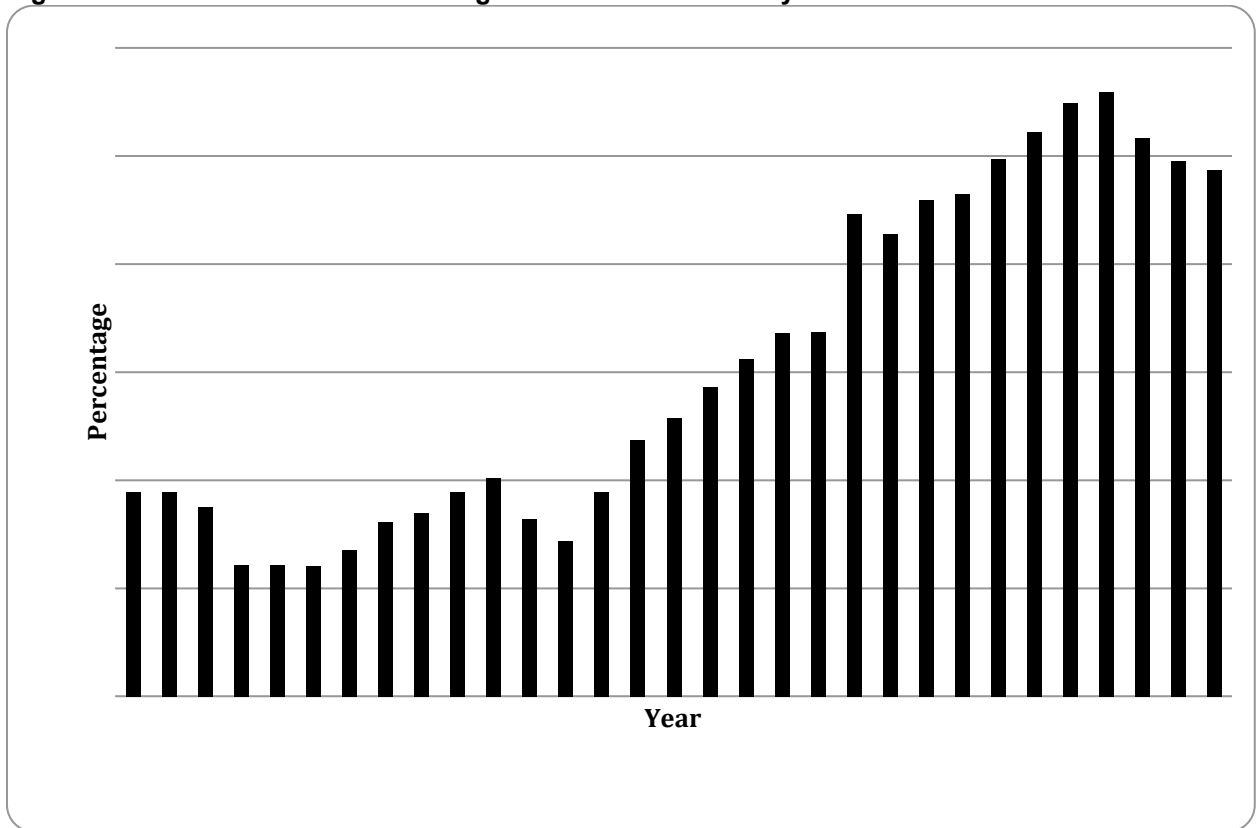


Figure 14. Resident Licenses

The percent of Arizona residents who purchased hunting licenses has decreased since 1993 with only 2.8% of Arizonans purchasing a hunting license in 2003 (Figure 14). This decrease is more a reflection of Arizona's population increasing while the number of resident hunters remained stable. The proportion of non-resident to resident hunting license purchasers was 14.8% in 2003, a 2.5% increase from 1999 (Figure 13 and 14).

Women continue to comprise only a small proportion of hunters, 5.8% in 2004 versus 6.4% in 2000 and 6.9% in 1987. Age data was not collected during this survey period. Results from the 2000 survey showed, ages reported on samples of licenses continued to increase during 1987-2000. Mean ages shifted upward from 36.8 in 1987 and 37.8 in 1993 to 44.7 in 1999.

Figure 15. Percent of Arizona Hunting Licenses Purchased by Nonresidents

Years of residency for Arizona resident hunters continue to shift towards the middle/older age classes. Education level of Arizona hunters continues to rise with 62.7% of respondents in 2004 completing trade school or some level of college. Over 50% of hunters reside in communities with populations less than 100,000.

In conclusion, following a steady decline of license sales from 1987 to 1992 the sales of hunting licenses increased each year through 2000, and from 2000 to present there has been a slow decline. Continued drought conditions adversely affecting most wildlife populations are a likely cause for the decline. The long-term outlook for hunting license sales does not look encouraging. The average age of hunters continues to increase while the number of young hunters remains stable. Special license (youth combination), special hunts (juniors-only big game hunts and juniors-only afternoon dove hunts), and special hunter education programs have allowed Jr. license sales to remain stable but not increase. In most respects, characteristics and opinions of hunters in 2004 were similar to those of hunters in 1987, 1994 and 2000. They remain heavily male and middle-aged with average or slightly higher levels of education.

Participation - Angler

The most recent Angler data collected by the Arizona Game & Fish Department was compiled in 2001. On average Arizona anglers in 2001 spent 19 days fishing. The

average angler spent 11 days fishing for trout and 16 days for non-trout angling. Since 1986 the average days fished has increased to a high of 22.7 in 1992. This activity level has since dropped to 19.1 days in 2001.

Individuals who fished in Arizona during 2001 took on average 15 fishing trips. One person recorded a maximum of 300 trips, a very avid angler. The majority of anglers take multiple one-day trips for fishing.

Since 1986, Statewide Angler Surveys have collected trout and non-trout fishing data. This information was grouped into three categories, trout only anglers, mixed (anglers fishing for both trout and non-trout species), and non-trout only anglers. The distribution of these angler types has remained constant from 1986 to 1995. In 2001 the distribution shifted with the mixed group increasing to 43% and the non-trout only anglers dropping to 32%. This change in angler type proportions may in part reflect an increase in the occasional or generalist angler.

The average hours spent fishing per “day” for trout and non-trout species was investigated in this survey. Anglers on average spent 5.4 hours fishing for trout and 6.0 hours fishing for non-trout species such as largemouth bass and channel catfish. Overall, people fished for 5.7 hours per day in 2001. Generally, the hours spent on coldwater angling for trout were less than those spent on warmwater species. These results are similar to findings from creel (angler catch) studies throughout the State.

Licensed anglers that did not fish in 2001 were asked to indicate the primary reason for not fishing. Of the 16% that did not fish in 2001, 48.3% indicated “Not enough spare time” as the major reason for not participating in fishing. The actual number of licensed anglers in Arizona is calculated at 360,334 license holders, of which 265,605 are resident, 24,451 are non-resident and the remaining 70,274 make up the mixed residency category.

Programs to Promote Outdoor Recreation

Arizona’s Urban Fishing Program:

Arizona’s Urban Fishing Program is recognized nationally as one of the best in the country. The Program is a partnership with the Game and Fish Department and local Parks and Recreation Departments to intensively stock and manage park lakes for fishing recreation. Simply put, the Program operates on the premise that “if people can’t get out of town to fish, we will bring fish into town for the people.” The Program provides convenient, affordable, accessible and fun fishing for anglers of all ages and abilities.

There are currently 20 designated Urban Fishing Program lakes in 11 cities. These lakes are intensively stocked from 20-24 times per year with trout, catfish and sunfish. The cost of bringing these keeper-sized fish into city park lakes means that anglers age 14 and over must purchase a \$16 Class U (urban fishing) license to fish Urban Program lakes. Signs posted at each park identify participating lakes

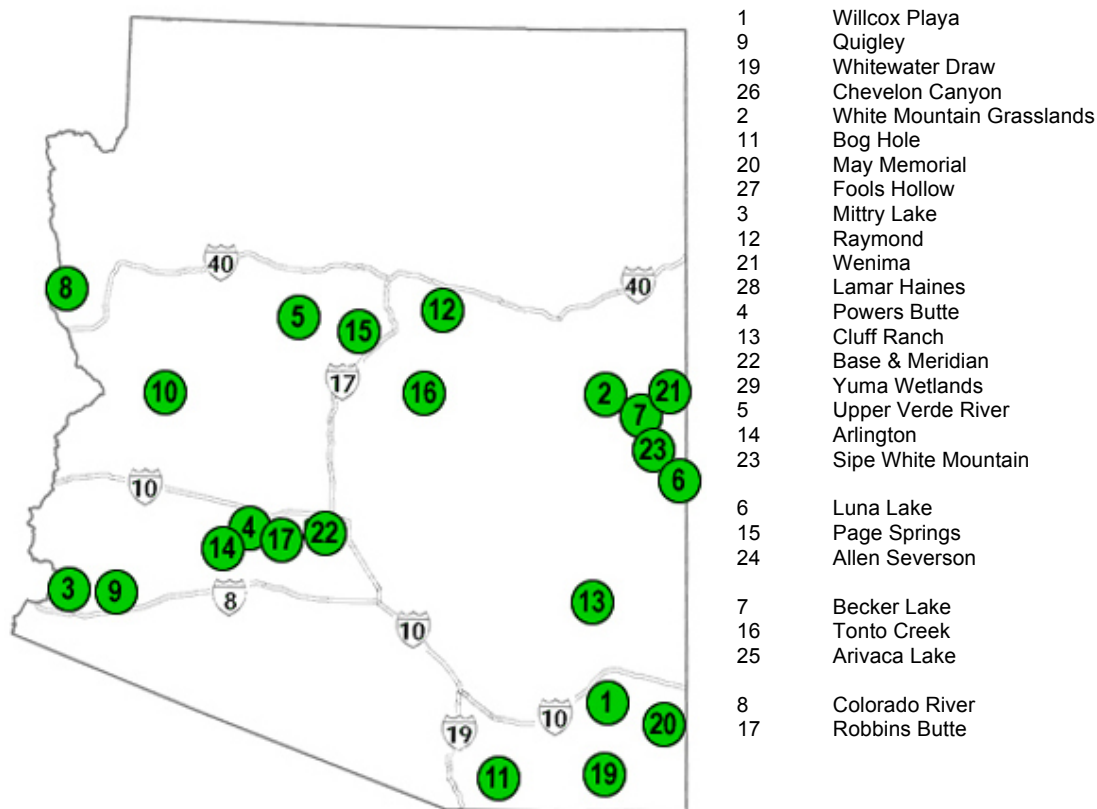
These specially designated Program lakes are stocked with healthy, catchable fish on an every-other week basis throughout most of the year. Farm-raised channel catfish (15-18 inch average) are stocked from mid March through early July and from late September through mid November. Rainbow trout (9-12 inch average) are stocked from mid November to March. Sunfish are stocked two times during the year in May and November. There are no fish stockings scheduled between July 10 and September 20 due to high lake temperature conditions and the high risk of transporting fish this time of year.

Many fishing clinics and educational programs are held each year at park lakes. Youth participation is a high priority and they represent 25% of the Program participants. In addition to catching healthy and delicious 11-inch trout and 1.8-pound catfish, anglers benefit socially and psychologically by spending time with friends and family.

Arizona's Watchable Wildlife Program

The Arizona Game and Fish Commission currently owns or manages more than 266,870 acres of land statewide, including wildlife areas, fish hatcheries, shooting ranges, and regional offices. Most wildlife areas are available for public uses, generally including fishing, hunting, camping, hiking, birding and viewing wildlife. Each year the Department acquires more land to provide outdoor recreational opportunities to the public.

Figure 16. Arizona Game & Fish Department Owned Wildlife Areas



Wildlife Areas



The Arizona Game and Fish Commission owns or manages more than 266,870 acres of land statewide, including wildlife areas, fish hatcheries, shooting ranges and regional offices.

Most wildlife areas are available for public use, generally including wildlife viewing, fishing, hunting, camping, hiking, and birding. For more information on recreational opportunities, click on the specific wildlife area below.

NATIONAL WETLANDS PRIORITY CONSERVATION PLAN

Background

The U.S. Fish and Wildlife Service (USFWS) is responsible for preparing the National Wetlands Priority Conservation Plan (NWPCP). The NWPCP provides a planning framework, criteria and guidance to assist agencies in identifying the types and locations of priority wetlands warranting consideration for state and federal acquisition and protection in accordance with Section 303 of the Emergency Wetlands Resources Act of 1986. Section 303 amends the Land and Water Conservation Fund (LWCF) Act to **authorize wetlands specifically as suitable replacement for LWCF lands slated for conversion to other uses**. The NWPCP applies only to wetlands that would be acquired by Federal agencies and States using LWCF appropriations.

The NWPCP was printed by the USFWS in 1989 and updated in 1991. Copies are available from the Service Publications Unit (Region 8) located in Arlington, Virginia (call USFWS, 703-358-2161).

Regional USFWS Offices are responsible for maintaining a Regional Wetlands Concept Plan, in coordination with State fish and wildlife agencies and other State and Federal agencies, that include lists of wetland sites warranting priority for acquisition. Arizona falls under the USFWS Region 2 office. For information regarding the Region 2 Regional Wetland Concept Plan published in 1991, contact the Regional Wetlands Coordinator, USFWS National Wetlands Inventory, P.O. Box 1306, Albuquerque, New Mexico 87103.

The U.S. Fish & Wildlife Service most recent report, *Status and Trends of Wetlands in the Conterminous United States 2004 to 2009*, indicated that there were an estimated 110.1 million acres (44.6 million ha) of wetlands in the conterminous United States in 2009 (the coefficient of variation of the national estimate was 2.7 percent). An estimated 95 percent of all wetlands were freshwater and 5 percent were in the marine or estuarine (saltwater) systems. With the exception of minor statistical adjustments to the area estimates, the overall percentage of wetland area and representation by saltwater and freshwater components remained unchanged. The difference in the national estimates of wetland acreage between 2004 and 2009 was not statistically significant. Wetland area declined by an estimated 62,300 acres (25,200 ha) between 2004 and 2009. The reasons for this are complex and potentially reflect economic conditions, land use trends, changing wetland regulation and enforcement measures and climatic changes. Certain types of wetland exhibited declines while others increased in area.

Arizona's Wetland Priorities

In Arizona, all occurring wetland types are naturally scarce. Because the state's wetlands are believed to have been generally attenuated in the last 140 years, and the process may be continuing, all wetland types are considered eligible for acquisition or other protection. Under the LWCF program, existing facilities acquired or developed with LWCF monies must be replaced if converted to nonrecreational uses. In choosing acceptable replacement sites, wetlands should be ranked for acquisitions. After determining that wetlands will be acquired or converted under Section 6(f) of the LWCF program, the priorities identified in this plan should take precedence for determining the best sites.

The wetlands acquisition priorities listed in this plan represent no change from those appearing in the 1988, 1994, 2003 and 2008 Wetlands Addendum to the SCORPs. These priorities are based on NPS guidelines and the methods outlined in the NWPCP. Acquisition priorities for general wetland types in Arizona were determined by consultations with the U.S. Fish and Wildlife Service and Arizona Game and Fish Department and were prioritized in relation to the nation's priority listings in the NWPCP (Table x).

Priority Consideration will be given to the following (all are weighted equally):

1. Wetland types least protected by regulation or preservation (public or private).
2. Wetland types that have been destroyed, altered or degraded within the state.
3. Regions within the state with the least number of wetlands protected by regulation

- or preservation (public or private).
4. Wetland sites subject to identifiable threat of loss or degradation.
 5. Wetland sites with diverse functions and values and/or high or special values for specific wetlands.
 6. Wetland sites that are contiguous to protected areas or public land, or provide corridors, or enhance the functions and values of adjacent wetlands.

Table 28. Priority Wetland Types

	NWPCP	Arizona
Decreasing	Palustrine emergent	Palustrine emergent
	Palustrine forested	Palustrine forested
		<i>Upper Riparian</i>
		<i>Lower Riparian</i>
	Palustrine scrub/shrub	Palustrine scrub/shrub
		<i>Upper Riparian</i>
		<i>Lower Riparian</i>
	Estuarine intertidal emergent	*Palustrine open water
	Estuarine intertidal forested	*Lacustrine
	Estuarine intertidal scrub/shrub	Riverine
Stable	Marine intertidal	
	Estuarine intertidal non-vegetated	
	Estuarine subtidal	
Increasing	Lacustrine	
	Palustrine open water	
	Palustrine unconsolidated shore	
	Palustrine non-vegetated	
*Naturally occurring wetland types		

Wetlands

Wetlands have long been recognized as critical to a clean, properly functioning environment and to ecosystem health. They provide a protective buffer for our towns and cities against floods and storm surges; and they provide important ecological benefits, contributing to water quality, supplying life-sustaining habitat to hundreds of species, and connecting aquatic and terrestrial ecosystems.

The Nation's wetlands provide an array of benefits to society, and their continued ability to function and thrive affects the economic, ecological, and cultural heritage of all Americans. The importance of wetland stewardship is reflected in the array of public-private partnerships that have formed, enhanced through efforts at the Federal level.

Recognizing the need for more effective use and coordination of Federal wetland activities, on April 22, 2004, President George W. Bush announced a new national policy on wetlands to go beyond "no net loss" of wetlands and attain an overall increase in the quality and quantity of wetlands in America. As President Bush said in April 2004, *"The old policy of wetlands was to limit the loss of wetlands. Today I'm going to announce a new policy and a new goal for our country: Instead of just limiting our losses, we will expand the wetlands of America."*

The goal is to restore or create, improve, and protect at least three million wetland acres between Earth Day 2004 and 2009. Between 1998 and 2004 there was a net gain of 191,750 wetland acres. After two years of progress toward the President's five-year goal, the team of six Federal departments and multiple states, communities, tribes, and private

landowners is on track to meet or exceed this goal. Since this goal was set in 2004, 1,797,000 acres of wetlands have been restored, created, protected, or improved.

Because more than 85% of our Nation's wetlands are on non-Federal lands, the effectiveness of Federal efforts to improve the health, quality, and use of the Nation's wetlands will be greatly enhanced by expanding public-private partnerships. Through cooperative conservation, the Federal government can facilitate these partnerships by providing matching grants, technical assistance, and opportunities for recreation and other activities. Federal agencies must encourage and partner with non-Federal parties (state and local governments, tribes, and nongovernmental organizations). Well-coordinated public-private partnership efforts focused on wetland opportunities will yield significant ecological benefits.

Wetlands can be added by creating new wetlands or by restoring former wetlands lost to drainage. New wetlands are created in upland areas or deepwater sites. A gain in wetland acres may also be achieved by re-establishing former wetlands to restore functions and values approximating natural/historic conditions. Because of difficulties in establishing wetlands in upland areas, agencies have preferred to re-establish former wetlands when possible. In many cases the necessary soils and seed stock still exist, and wetlands flourish once more as soon as the hydrology is restored.

Some degraded wetlands do not function properly because of past or present stressors. Agencies can improve wetlands by modifying the physical, chemical, or biological characteristics of a degraded wetland site with the goal of repairing its natural/historic functions and associated values (referred to as rehabilitation). They also can modify the physical, chemical, or biological site characteristics to heighten, intensify, or improve specific functions or to change the growth stage or composition of vegetation. These actions are taken with a specific goal in mind, such as improving water quality, floodwater retention, or wildlife habitat. This type of improvement, called enhancement, results in a change in wetland functions and associated values, may lead to a decline in other wetland functions and values, and does not result in a gain in wetland acres.

Priority wetlands can be protected from activities that may imperil their existence or condition. In this report, protection refers to acquisition of land or easements of at least 30 years. Because protection maintains the base of existing wetlands, it does not result in a gain of wetland acres or function.

Federal wetland projects often involve partnerships of state and local governments and nongovernmental and private organizations seeking to acquire wetland habitat. These acquisitions may be incorporated into the FWS National Wildlife Refuge System or into a state's protected area system, or they may be included in holdings protected by a nonprofit conservation organization (e.g., The Nature Conservancy).

Definition: Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands must meet at least one of the following: 1) at least periodically the land

supports predominately hydrophytes, 2) the substrate is predominately undrained hydric soil, 3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

Chapter 5

2013 SCORP SURVEY FINDINGS

Involved Recreation Users' Responses Regarding Outdoor Recreation Participation, Future Demand and Issues

To gather current information on outdoor recreation trends and issues, Arizona State Parks revised two questionnaires created in partnership with Arizona State University, School of Community Resources and Development, in 2006. The instruments were reviewed by a group of professionals in the field of outdoor recreation for relevance, questions were added, edited and removed to reflect the most central issues in the last five years. The first was an online survey targeting Outdoor Recreation Providers such as local parks and recreation departments, State Parks, wildlife and land management departments, federal land managing agencies (National Forests, Parks, Wildlife Refuges and Bureau of Land Management), and tribal governments. The second was an online survey targeting Involved Recreation Users who utilize recreation facilities in Arizona.

The web-based survey was made available to more than 365 outdoor recreation site managers and agency personnel in Arizona from May 1 through May 31. An initial letter, and instructions for accessing the online survey were sent to agency contacts, with the request to forward the information on to appropriate respondents within their agencies or organizations. In addition, several follow-up email reminders were sent to original agency contacts to encourage participation. Arizona State Parks received 125 surveys, 95 of which were completed for a response rate of 26%. The margin of error was +/- 8.66%. (Note: This response rate is likely inflated since the provider invitation was forwarded to others not on the original provider list generated by Arizona State Parks and reviewed and revised by the SCORP Working Group). This survey was conducted to determine, from the resource managers' perspective, the current outdoor recreation opportunities, issues, concerns and priorities.

The online Involved Recreation User survey was also conducted beginning May 1 through May 31, 2012. Participants in the Involved Recreation User survey were recruited using the following methods: an email invitation to participate in the Recreation User survey was sent to the SCORP Work Group members, to colleagues of Arizona State Parks staff and to the list of recreation providers who were asked to participate in the Providers Survey. They were asked to include this information in their email newsletters, or list serves. Organizations such as Arizona Office of Tourism and Arizona Game & Fish included the information in their email newsletters. In addition, a press release was made available and picked up by media in various parts of the state informing the public about the SCORP survey. In addition, bookmarks with SCORP information were distributed to the SCORP Work group to put out at recreation or visitors centers. A limited amount of the bookmarks were also distributed at both public and private partner facilities in the Phoenix metro area (e.g., REI, libraries, Boy Scouts/Girl Scouts, etc.). Finally, information about the SCORP was posted to Arizona State Parks webpage, and partners, providers and SCORP Work Group members were encouraged to do the same.

Thus the sample represents the feedback of a group who have visited outdoor recreation sites recently, are signed up or were looking for information from public land managing agencies or are likely to get outdoor recreation information via newspaper or online. Surveys were conducted in English only. The results include findings from 2,449 Involved Recreation Users. Because the distribution method was multi-tiered (information was sent to providers to send to their constituents), a response rate cannot be calculated.

Because a non-probability sampling strategy was used for the survey of Involved Recreation Users, conclusions drawn regarding this group are representative only of those individuals who participated in the survey and cannot be generalized to any larger population or group. The online Involved Recreation User survey covers the participation and future needs of both Arizonans and visitors from outside of the state in 37 outdoor recreation activities, and benefits the public perceives from outdoor recreation. Arizona residents were also asked about funding priorities, outdoor recreation issues and how their recreation experience has changed in the last five years. These results are further broken down and examined by the specific high frequency user groups (e.g., hikers, OHV users, hunters, etc).

DEMOGRAPHICS

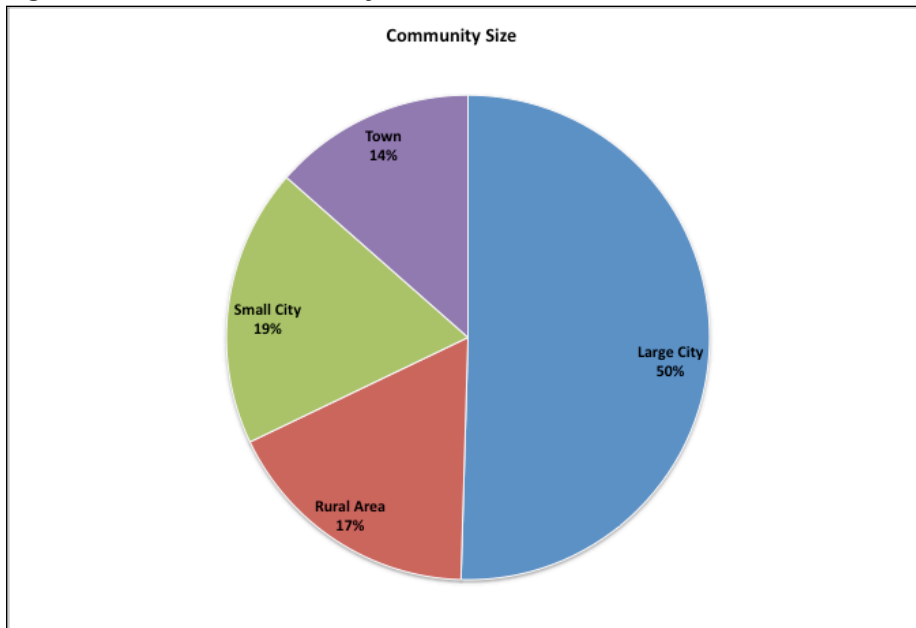
The following demographic information from both surveys may be of use to recreation planners and providers in determining the need for various types of parks, facilities and programs.

Overall Demographics

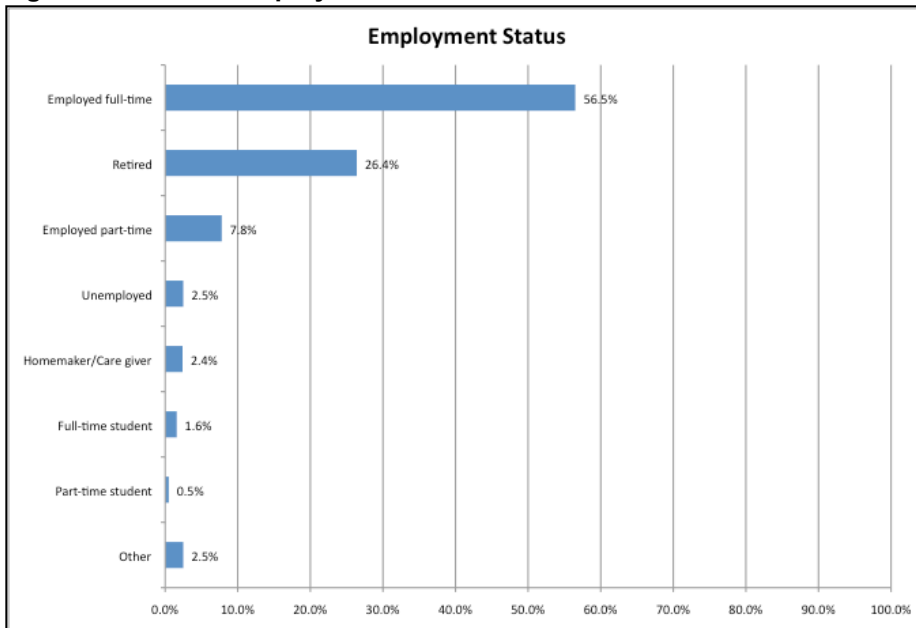
These demographics include all respondents including Arizona residents and out-of-state residents.

There were 2,449 surveys returned. Arizona residents represent ninety-five percent of the responses leaving only five percent of the responses from out-of-state residents. Approximately one-fifth of the out of state residents were from California and another eleven percent were from Canada. Approximately two-thirds of the respondents were male between the ages of 50-54 years old. Although not representative of the population of the state or nation, this overrepresentation by males is not uncommon in the area of outdoor recreation, where males are more likely to participate than females at all age groups, and more so in older age groups (Outdoor Industry Association, 2012).

Almost one-half of the residents are from a large city (50%) with a population of over 100,000, less than one-fifth resided in a small city (19%) with a population between 35,000 to 99,000, 17% lived in a rural area and another 14% lived in a town with a population less than 34,999. The average adult household size was 2.02 adults and approximately two-thirds of the respondents indicated that they did not have any children under the age of 18 years.

Figure 17. Overall Community Size – Involved Recreation Users

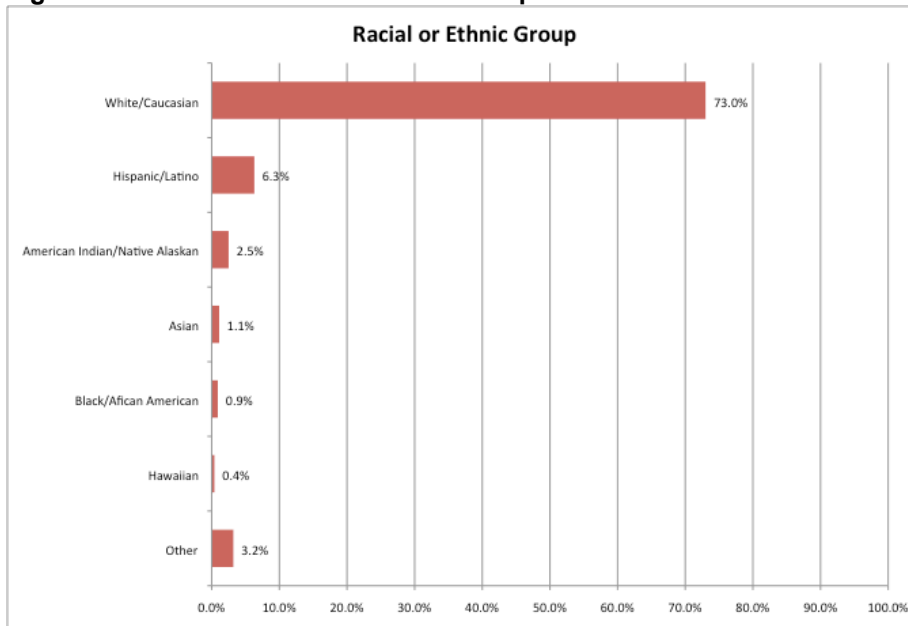
More than half of the respondents (56.5%) are employed full-time and another twenty-five percent state they were retired and had a median annual income between \$75,000 and \$99,000.

Figure 18. Overall Employment Status – Involved Recreation Users

Almost three-quarters (73%) of the respondents indicated they were Caucasian and less than ten percent (6.3%) stated they were Latino/Hispanic. Again, although not representative of the population of Arizona or the U.S., this pattern of participation is consistent with national reports, such as that by the Outdoor Industry Association (2012)

that have found that approximately three-quarters (74%) of outdoor recreation participation is attributable to Caucasian participants, whereas Hispanic or Latino and Black/African-American Americans, ages 6 and older, participate at a rate lower than would be expected given their representation in the population. Thus, although the Involved Recreation User survey sample is a non-probability sample, it is similar to national samples in the ethnic breakdown of respondents.

Figure 19: Overall Racial or Ethnic Group – Involved Recreation Users



Seventy-five percent of the respondents stated that no one in their household had a disability. Twelve percent of the respondents indicated that they themselves have a disability and another twelve percent indicated that someone in their household has a disability. When asked to list the type of disability they or the person in their household experienced, mobility was the most common response with twelve percent.

Demographics of High Frequency Activity Respondents

In addition to the statewide information provided by the overall sample of Involved Recreation Users above, several groups were examined separately to provide more information. For example, only Arizona residents were presented with items regarding funding priorities, outdoor recreation issues and meeting the needs of specific populations. In addition, several High Frequency User groups were selected for closer observation. First, according to Cordell & Betz (1996), active participants in outdoor recreation user groups account for more of the participation and activity, equipment sales and upgrades, therefore it is worthwhile for outdoor recreation agencies to identify the needs and priorities of these groups. Therefore, High Frequency User groups were identified as those who participated in an activity once a week or more. However, due to the large number of activities included in the survey, not all High Frequency User groups could be examined, therefore, activities were selected that are considered “gateway”

activities - those that are popular, accessible and often lead participants to try other outdoor recreation activities, or are likely to be done in combination with other activities (Outdoor Industry Foundation, 2012). Gateway activities include: running, jogging and trail running, fishing, biking, RV camping and hiking. Initial analyses and the SCORP Work Group identified several other groups of interest, who were added to these High Frequency Users of selected gateway activities. These analyses allow readers to better understand who participated and who did not participate in the Involved Recreation User sample.

High Frequency User Group Demographics

In some ways, High Frequency User groups didn't differ. A majority of the respondents resided in a large city, lived in a household of two adults, with an average of less than one child under the age of 18 per household. The average age of High Frequency Users was between 45 to 59 years old, and they had an average salary of between \$75,000 to \$99,000.

Below are some of the other demographic characteristics of these High Frequency User groups.

Table 29: Demographics of High Frequency User Groups

	Male	Female	Large City	Small City	Town	Rural Area
Bird-watching and photography	56.8%	43.2%	43.9%	17.7%	14.8%	20.3%
Visit a local park	65.1%	34.9%	57.5%	19.0%	11.3%	10.3%
Visit a natural or wilderness area	52.9%	47.1%	48.5%	19.2%	14.8%	13.7%
Nature study or environmental education activities	46.2%	53.8%	46.5%	18.1%	12.5%	18.1%
4-wheel driving	80.4%	11.2%	31.3%	22.7%	15.2%	26.5%
Off-highway vehicle use	84.4%	15.6%	34.1%	21.2%	14.3%	26.7%
RV camping	63.2%	36.8%	27.9%	27.9%	11.8%	26.5%
Walking, jogging or running on trails or at a park	57.3%	42.7%	52.1%	20.1%	12.9%	12.7%
Fishing	84.0%	16.0%	40.8%	21.3%	12.5%	21.3%
Hunting	96.3%	3.7%	46.6%	18.7%	11.9%	18.7%
Day hiking	57.2%	42.8%	44.2%	20.3%	14.7%	18.0%

Ethnicity of High Frequency Activity Respondents

Similar to the overall sample, over 75 percent of respondents for all activities indicated they are Caucasian. The second most common ethnicity indicated on the survey was Hispanic/Latino, which was less than ten percent.

Table 30: Ethnicity of High Frequency User Groups

Ethnicity	Hispanic/Latino	African American	Caucasian	Asian	American Indian	Hawaiian
Bird-watching and photography	4.0%	0.5%	83.1%	1.0%	2.9%	0.2%
Visit a local park	6.2%	0.9%	81.6%	1.1%	2.0%	0.2%
Visit a natural or wilderness area	5.3%	0.8%	79.2%	1.6%	2.7%	0.5%
Nature study or environmental education activities	4.9%	0.0%	86.3%	0.7%	0.0%	0.0%
4-wheel driving	4.0%	0.9%	77.7%	0.4%	2.2%	0.9%
Off-highway vehicle use	3.4%	0.0%	77.8%	0.0%	2.8%	2.8%
RV camping	4.8%	0.0%	77.8%	0.0%	2.8%	2.8%
Walking, jogging or running on trails or at a park	6.2%	0.5%	83.8%	1.5%	2.0%	0.3%
Fishing	5.6%	0.8%	84.2%	1.2%	3.6%	1.2%
Hunting	3.8%	1.0%	81.2%	1.0%	3.4%	1.0%
Day hiking	2.9%	0.2%	82.3%	0.6%	0.6%	0.0%

Employment Status of High Frequency Activity Respondents

A majority of the respondents of all High Frequency Users were either employed full-time or retired.

Table 31: Employment Status of High Frequency User Groups

Employment	Unemployed	Employed Part time	Employed Full Time	Homemaker/ Caregiver	Retired
Bird-watching and photography	2.4%	9.8%	43.8%	2.1%	36.7%
Visit a local park	1.5%	7.8%	62.5%	4.9%	19.7%
Visit a natural or wilderness area	3.0%	8.9%	50.9%	4.2%	27.7%
Nature study or environmental education activities	2.8%	11.2%	51.0%	2.1%	24.5%
4-wheel driving	1.9%	3.8%	58.2%	1.4%	31.3%
Off-highway vehicle use	1.4%	5.6%	56.8%	0.9%	31.5%
RV camping	0.0%	5.9%	33.8%	2.9%	54.4%
Walking, jogging or running on trails or at a park	2.3%	9.3%	53.6%	4.3%	24.9%
Fishing	3.4%	5.9%	47.0%	2.1%	34.7%
Hunting	3.6%	5.2%	67.9%	0.0%	18.7%
Day hiking	1.9%	9.7%	51.2%	2.1%	29.0%

*Because of the low representation of full-time and part-time students on the survey, the results were not represented on this table.

Table 32: Disability Status of High Frequency User Groups

Disability	Disability*	Hearing	Speech	Mental	Visual	Mobility	Chemical Sensitivity
Bird-watching and photography	25.0%	5.6%	0.0%	2.9%	1.7%	12.8%	2.2%
Visit a local park	21.9%	4.7%	0.0%	2.7%	2.7%	12.4%	1.6%
Visit a natural or wilderness area	18.6%	4.3%	0.3%	1.3%	2.1%	10.9%	1.1%
Nature study or environmental education activities	20.4%	4.6%	0.0%	3.9%	1.3%	9.2%	2.6%
4-wheel driving	30.2%	5.8%	0.0%	4.5%	1.8%	20.1%	1.3%
Off-highway vehicle use	25.5%	6.7%	0.0%	2.7%	1.3%	16.4%	0.9%
RV camping	35.4%	6.9%	0.0%	2.8%	4.2%	23.6%	0.0%
Walking, jogging or running on trails or at a park	17.7%	4.0%	0.2%	2.5%	1.8%	9.4%	1.3%
Fishing	30.9%	9.1%	0.0%	2.8%	3.2%	20.6%	1.2%
Hunting	22.9%	5.3%	0.0%	1.9%	1.9%	16.4%	0.5%
Day hiking	17.6%	4.3%	0.0%	2.6%	1.7%	8.7%	1.1%

*Represents the respondents who either have a disability themselves or reported that someone in their household has a disability.

Involved User Survey – Arizona Residents Only

Although the survey link was provided to constituencies that included out-of-state residents (e.g., Arizona Office of Tourism newsletter, agency web pages), due to the time of year the survey took place (e.g., most winter visitors had left the state), the method of survey distribution (e.g., mostly through agency listserves, program participants, etc.), the majority of survey respondents were Arizona residents (n=1874). Although the sample of Involved Recreation Users is a non-probability sample, it is still informative to examine the differences between the sample and Arizona residents in order to put the characteristics of the sample into context, and so that Providers may assess how the sample relates to their own constituencies. Similar to the overall sample, almost three-quarters of the Arizona respondents were male (71.6%) with an average age between 50-54. On average, Arizona residents had lived in the state for thirty years. Less than half

(45.5%) of the Arizona residents live in Maricopa County while approximately one-fifth live in Pima County, Yavapai County residents represented less than ten percent of the Arizona respondents.

Table 33. Percentage of Arizona Residents By County

Maricopa	45.5%
Pima	18.8%
Yavapai	8.7%
Mohave	5.5%
Coconino	4.6%
Pinal	4.1%
Navajo	3.4%
Cochise	3.2%
Gila	2.1%
Apache	1.3%
Yuma	1.0%
Santa Cruz	0.7%
La Paz	0.5%
Graham	0.4%
Greenlee	0.2%

Half of Arizona residents (50.3%) indicated they lived in a large city with a population over 100,000, almost one-fifth (17.8%) on average lived in a small city with a population under 100,000, 12.4% lived in a town and 16.4% lived in a rural area.

Approximately ten percent of the respondents indicated they spoke a language other than English. Of those that spoke another language, one-half of respondents spoke Spanish.

The average household size of Arizona resident Involved Recreation Users was 2.02 people, which is less than the Arizona's average is 2.63. Approximately seventy percent of respondents indicated they did not have any children under 18 years of age living at home. This proportion is similar to the Arizona 2010 census which reports an average of 33.6% households have children under the age of 18 years.

More than half of respondents were employed full-time, while one-quarter were retired and had a median household income between \$75,000 and \$99,000.

Table 34: Employment Status of Arizona Residents

Employment Status	SCORP Inv Users – AZ Res		US Census AZ percent
Unemployed	2.2%	Did not work (include retired & caregivers)	28.6%
Employed part-time	7.7%	Worked 1-34 hours	16.9%
Employed full-time	57.7%	Worked 35 hours or more	54.4%
Homemaker/Care giver	2.5%		
Retired	25.7%		
Full-time student	1.6%		
Part-time student	0.5%		
Other	2.1%		

The majority of the respondents stated they were White/Caucasian (85.7%), Arizona's average is 76%. Hispanic or Latinos represented less than 10 percent of the responses (6.3%), the Arizona average Hispanic/Latino population is 30%. The other ethnic groups are lower on average when compared to Arizona's state average with the exception of Hawaiian, which is comparable to the Arizona census.

Table 35: Ethnicity of Arizona Residents

Answer Options	SCORP Response	AZ 2010 Census
White/Caucasian	85.7%	75.9%
Hispanic or Latino	6.3%	29.6%
American Indian/Alaskan Native	2.9%	5.5%
Asian	1.1%	3.6%
Black/African-American	1.0%	5.0%
Hawaiian	0.5%	0.4%
Don't know	1.6%	
Other	3.7%	13.2%

Twelve percent of respondents said they had a disability, while another 12% said that someone in their household had a disability, in comparison, 11% of Arizonans report having a disability in the Arizona 2010 Census. Disabilities could include hearing, visual, speech, mobility, mental, or chemical sensitivity. The most common type of disability mentioned is mobility.

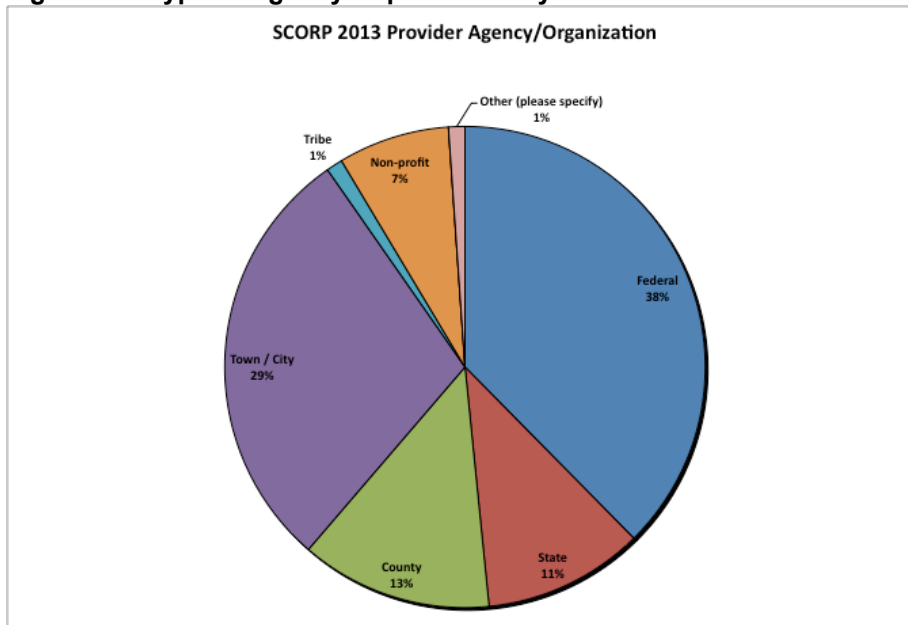
Table 36: Disability of Arizona Residents

SCORP Answer Options	SCORP Response	2010 Census Answer Options	AZ 2010 Census
Hearing	5.7%	Hearing	5.3%
Speech	0.4%	Cognitive	5.6%
Mental	3.1%	Vision	5.6%
Visual	2.2%	Ambulatory	5.7%
Mobility	14.4%	Self-care difficulty	5.6%
Chemical sensitivity	1.1%	Independent Living difficulty	5.6%

Providers Survey

Respondents from the Outdoor Recreation Providers survey are professionals of various city, town, county parks and recreation departments, non-profit organizations, state and federal land management agencies (or those departments with recreation responsibilities.)

Federal agencies had the highest provider representation, which made up more than one-third of the sample, while only one percent of the responses were from tribal organizations.

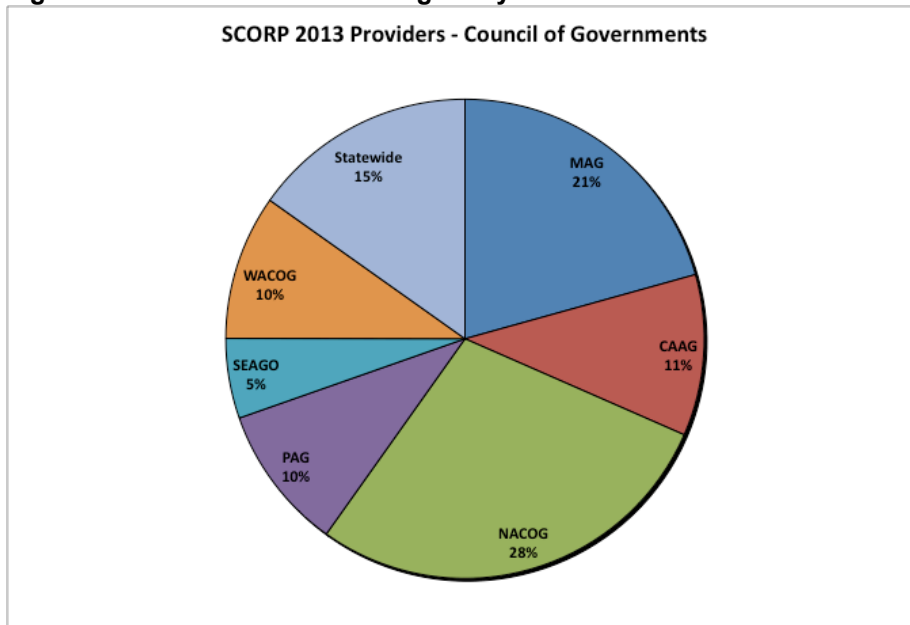
Figure 20. Type of Agency Represented by Providers

Respondents' answers can be examined by type of agency, region or Council of Government jurisdictions, type of community served and years of experience with current agency. The usual demographic questions, such as those found on the Involved Recreation User Survey do not apply to the Provider survey since respondents were asked to respond as a representative for their agency, not as an individual recreationist.

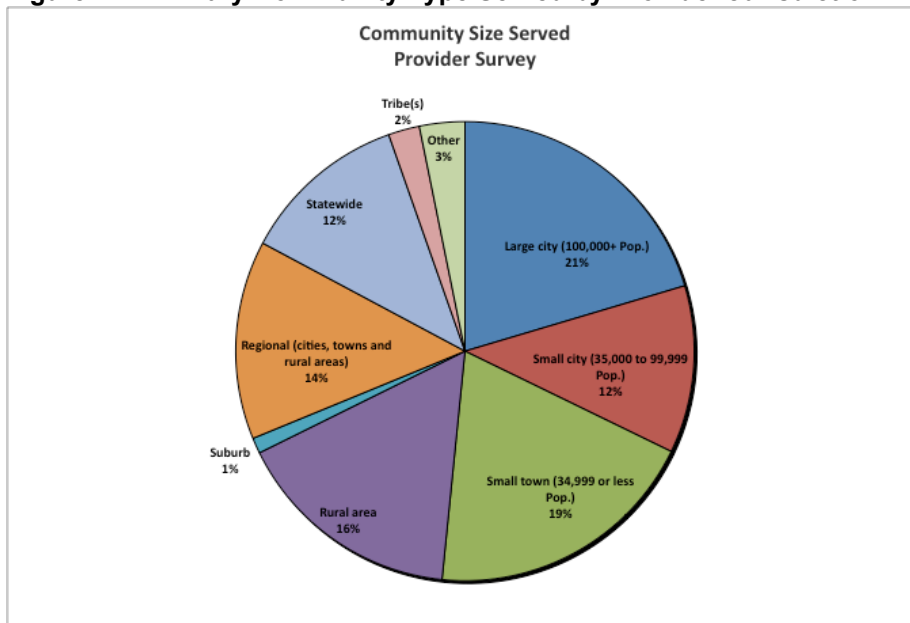
For the purposes of comparison to 2008 SCORP information, the Provider Survey is presented by Councils of Government. The Councils of Government acronyms are as follows:

- Central Arizona Association of Governments (CAAG) - Gila and Pinal Counties
- Maricopa Association of Governments - (MAG) – Maricopa County
- Northern Arizona Council of Governments (NACOG) – Apache, Coconino, Navajo and Yavapai Counties
- Pima Association of Governments - (PAG) – Pima County
- South Eastern Arizona Governments Organization – (SEAGO) – Cochise, Graham, Greenlee and Santa Cruz Counties
- Western Arizona Council of Governments – La Paz, Mohave and Yuma Counties

All regions of the state are represented by the Provider respondents. Some respondents work for the main office of an agency that manages lands throughout Arizona such as the State Land Department Phoenix office, hence the *statewide* category. NACOG has the highest response rate with more than one-quarter, approximately one-fifth of the responses are from MAG and SEAGO has the lowest response rate of five percent.

Figure 21: Provider Location/Region by Council of Government

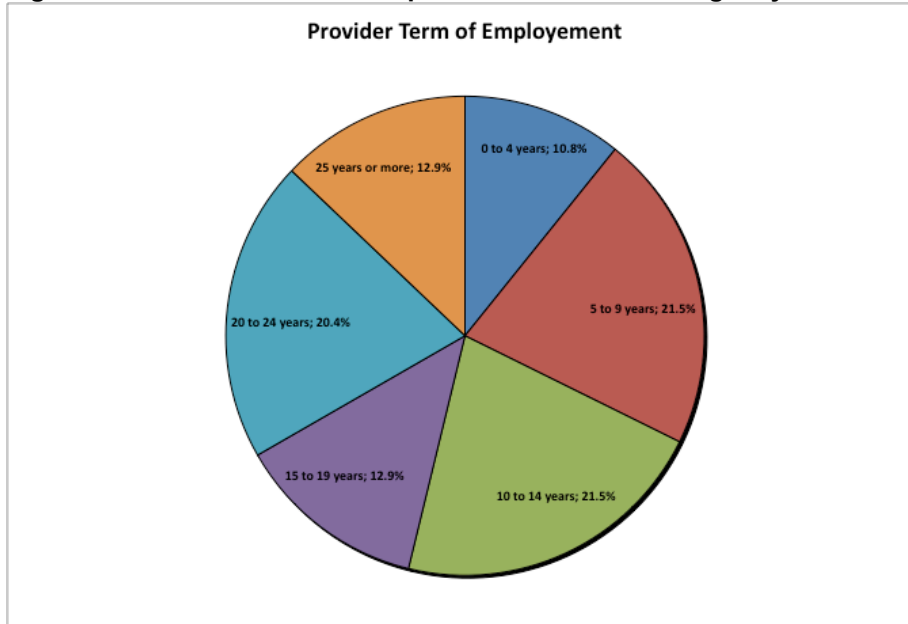
Respondents were asked to describe the *primary* community their organization serves. All types of communities are well represented by the respondents. Some state and federal respondents work in offices or departments that have management jurisdiction statewide such as the State BLM Office, while others work in offices that have smaller regional jurisdictions, such as the Safford BLM Field Office.

Figure 22. Primary Community Type Served by Provider Jurisdiction

Interesting to note that approximately one-third of the respondents (32.3%) have worked for their current agency for less than ten years, another one-third (34.4%) have worked between ten and twenty years, and the final one-third (32.3%) have worked twenty years

or more, indicating a considerable familiarity with both the subject of outdoor recreation and with the agency or region.

Figure 23. Provider Years of Experience with Current Agency



RECREATION SETTINGS

When asked the importance of different recreation settings (on a scale of 1 *Not important* to 5 *Extremely important*), respondents ranked the following settings higher: *open spaces in natural settings with very little development* (4.59), and *large, nature-oriented parks with few buildings primarily used for hiking, picnicking or camping* (4.19).

In the random sample of Arizona residents conducted in the 2008 SCORP, these two recreation setting were ranked first and second as well, however the mean ranking for nature oriented parks was lower for Involved Recreation Users in 2012 when compared to the rankings of Arizona residents in 2008 (4.19 as compared to 4.27) and the ranking for open spaces increased in comparison to the 2008 mean (4.59 as compared to 4.25).

Table 37: Importance of Recreation Settings – Involved Recreation Users

Recreation Settings	Not at all important	←————→				Extremely important	No Opinion	Mean
	1	2	3	4	5	6		
Open spaces in natural settings with very little development (n=2221)	.5%	2.7%	6.0%	18.3%	71.7%	.8%		4.59
Large, nature-oriented parks with few buildings primarily used for hiking, picnicking or camping (n=2210)	2.7%	6.4%	12.5%	25.7%	51.9%	.8%		4.19
Small neighborhood parks that have only a few facilities (n=2202)	11.1%	21.3%	31.6%	20.4%	14.3%	1.4%		3.06
Large, developed urban parks with many facilities and uses (n=2198)	14.3%	20.9%	29.3%	19.5%	15.1%	.9%		3.00

* “No opinion” responses were not included in the calculation of the mean.

Consistent with the mean ratings in the table below, according to the Outdoor Industry Foundation (2011), more outdoor recreationists rated preserving undeveloped lands for outdoor recreation as important than non-recreationists. The High Frequency User groups who participated in visiting and learning activities all rated the importance of open-space high (4.49 or above on a scale of 1 to 5). Generally, mean ratings on the importance of recreation settings increased with frequency of use for the user groups, although mean differences were not necessarily statistically significant, thus the mean ratings of respondents who did not participate in a visiting or learning activity were lower, in general, than those who did, and typically mean ratings increased with frequency of use.

In addition, recreation settings were ranked in the same order by High Frequency user groups below. Those who engage in nature study and environmental education once a week or more had a higher mean ratings on *open spaces in natural settings with very little development* (4.86) and *large, nature-oriented parks* (4.68), followed by frequent bird watchers/photographers (4.82 & 4.50 respectively), and those that visit natural and wilderness areas frequently (4.75 & 4.47 respectively). Although the rank order of mean ratings are consistent with other groups, those who visit local parks more frequently had higher mean ratings for *small neighborhood parks* (3.63), and *large developed parks* (3.56) than other groups.

Table 38: Importance of Recreation Settings by High Frequency User Groups – Visit / Learning Activities: Mean Value

Recreation Setting	Statewide	Bird watch (n=414)	Visit Local Parks (n=450)	Visit Nat Area (n=375)	Nat study / env ed (n=153)
Open spaces in natural settings with very little development	4.59	4.82	4.62	4.75	4.86
Large, nature-oriented parks with few buildings primarily used for hiking, picnicking or camping	4.19	4.50	4.45	4.47	4.68
Small neighborhood parks that have only a few facilities	3.06	3.27	3.63	3.09	3.43
Large, developed parks with many facilities and uses	3.00	3.02	3.56	2.95	3.12

Table 39: Importance of Recreation Settings by High Frequency User Groups – Land and Water-Based Activities: Mean Value

Recreation Setting	Statewide	4-wheel driving (n=224)	OHV use (n=225)	Hunting (n=207)	Day hiking (n=462)	RV camping (n=72)	Walk / jog / run at parks / on trail (n=605)	Fishing (n= 253)
Open spaces in natural settings with very little development	4.59	4.58	4.52	4.62	4.72	4.49	4.65	4.57
Large, nature-oriented parks with few buildings primarily used for hiking, picnicking or camping	4.19	3.80	3.71	3.57	4.48	4.33	4.48	4.12
Small neighborhood parks that have only a few facilities	3.06	2.82	2.74	2.57	3.08	3.16	3.28	3.01
Large, developed parks with many facilities and uses	3.00	2.55	2.61	2.38	2.89	2.97	3.26	2.98

Generally, mean ratings of the importance of the recreation settings above decrease with frequency of use for respondents who participate in 4-wheel driving, OHV use and hunting, whereas mean ratings increase with frequency of use for day hikers, and those who walk, run, or jog in parks or on trails. Those who reported RV camping moderately

(a few times a year to once a month) had lower mean ratings than for all other respondents who RV camp with varying frequencies or not at all.

However, all mean ratings for High Frequency User groups above indicate that *open spaces in natural settings* are important (mean ratings round to between 4 and 5 on a 5 point scale), with frequent hikers (4.72), walkers, runners & joggers on trails and in parks (4.65) and hunters (4.62) having the highest mean ratings, as are *nature oriented parks* (round to 4 on 5 point scale), with hikers (4.48) and walkers/joggers/runners (4.48) having the highest mean ratings, followed by frequent RV campers (4.33) and those who fish frequently (4.12). Ratings of *small, neighborhood parks* and *large, developed parks* are less important to the High Frequency User groups above (mean ratings round to 3 on a 5 point scale).

FUNDING PRIORITIES

Another important aspect of recreation planning is funding. One of the goals of this research was to determine the perceived level of importance by Arizona residents who are Involved Recreation Users regarding several funding issues. Respondents were asked how their local parks and recreation departments should spend the limited funds they receive. Respondents were given eight expenditure categories to rate, according to a five point scale ranging from one, meaning the funding issue is not at all important to 5, meaning it is extremely important.

Table 40: Funding Priorities– Arizona Residents

Funding Priorities	Not at all important	←————→				Extremely important	No Opinion	Mean
	1	2	3	4	5	6		
Maintaining existing outdoor recreation or cultural facilities (n=1831)	1.4%	1.5%	9.1%	25.2%	58.7%	4.2%		4.44
Protecting natural and cultural resources (both those open to the public and those that aren't) (n=1823)	2.2%	4.4%	14.9%	22.4%	52.2%	3.9%		4.23
Providing habitat and ecosystem preservation or restoration (n=1832)	2.8%	4.6%	13.1%	22.8%	53.0%	3.7%		4.23
Maintaining existing levels of recreation and cultural education programs (n=1837)	2.3%	4.4%	18.0%	27.7%	44.4%	3.2%		4.11
Acquiring land for more parks, open space, natural, cultural and recreation areas (n=1830)	4.8%	6.9%	15.7%	24.7%	44.2%	3.7%		4.00
Developing new outdoor recreation or cultural facilities (n=1823)	5.8%	11.4%	26.7%	29.6%	24.7%	1.8%		3.57
Developing new recreation or cultural education programs (n=1825)	6.6%	14.4%	30.7%	27.7%	18.6%	1.9%		3.38
Improving technology at outdoor recreation and cultural facilities (n=1828)	15.3%	20.2%	31.2%	19.4%	12.1%	1.8%		2.93

*Note: “No opinion” response options were not included in calculation of the mean.

While many funding categories ranked very high (on a scale of 1 to 5), *maintaining existing outdoor recreation or cultural facilities* was the highest rated priority (4.44),

followed by *protecting natural and cultural resources, whether open to the public or not* (4.23), and *providing habitat and ecosystem preservation and restoration* (4.23). *Maintaining existing levels of recreation and cultural education programs* (4.11) and *acquiring more land for parks, open space, natural and cultural recreation areas* (4.00) were also ranked as important.

Arizona residents were also asked if there were other funding categories that they thought were important but were not identified in the items above. Other priorities included:

- Keeping roads, public lands open and accessible to outdoor recreationists (35 comments)
- The maintenance and enhancement of facilities for watersports across the state (18 comments)
- Protecting and preserving public lands including habitats and wildlife (15 comments)
- Developing more facilities at current sites is a priority (e.g., bathrooms, etc) (15 comments)
- OHV use including the protection of access and funding and enhancing current opportunities and areas (15 comments)
- Maintaining or improving current facilities, especially for non-motorized trail use, for campers and cyclists (11 comments)
- Hunting opportunities should be protected and improved (11 comments)
- Education and educational materials (8 comments).
- Funding for acquisition of open space with little or no development (7 comments)
- Law enforcement and safety issues such as enforcement of existing laws, rules and regulations (6 comments)
- Providing a low cost recreation experience - fees have gotten too high (5 comments)
- Increased use/access to technology to enhance opportunities available and for safety (4 comments)
- Funds should not be used to promote a particular environmental agenda and to enhance agencies (4 comments)
- There should be less restrictions on open space and parks (3 comments)
- Litter removal (3 comments)
- Access to public lands should be free, which would promote more use of the lands (2 comments)
- Organizations need to find alternative funding by working with parties of interest (2 comments).
- Priority should be to keep the state from taking the funding available (2 comments)
- Making sites more accessible for persons with disabilities (2 comments)
- Staffing is a priority (2 comments)
- Earmarked funds should not be diverted for other purposes, specifically, OHV funds (2 comments)

- Maintenance of existing programs is important, although this should include an assessment of the utility of existing programs as well (1 comment)
- Multi-year planning and funding (1 comment)
- Creating an avenue where the public can give input into decisions made regarding parks and recreation funding (1 comment)
- Recreational resources are more important than cultural resources (1 comment)
- Issues with the survey items called into question the validity of the data collected -items were criticized for containing both natural and cultural resources in questions, not representing all public use on public lands, and the use of a non-probability sample and data collected using survey monkey online (8 comments)

Table 41: Funding Priorities by High Frequency User Groups – Arizona Residents – Visit / Learning Activities: Mean Value

Funding Priorities	Statewide	Bird watch (n=414)	Visit Local Parks (n=450)	Visit Nat Area (n=375)	Nat study / env ed (n=153)
Maintaining existing outdoor recreation or cultural facilities	4.44	4.52	4.60	4.53	4.51
Protecting natural and cultural resources (both those open to the public and those that aren't)	4.23	4.58	4.39	4.52	4.66
Providing habitat and ecosystem preservation or restoration	4.23	4.60	4.40	4.55	4.70
Maintaining existing levels of recreation and cultural education programs	4.11	4.27	4.23	4.16	4.40
Acquiring land for more parks, open space, natural, cultural and recreation areas	4.00	4.37	4.24	4.37	4.42
Developing new outdoor recreation or cultural facilities	3.57	3.60	3.75	3.64	3.73
Developing new recreation or cultural education programs	3.38	3.57	3.53	3.41	3.73
Improving technology at outdoor recreation and cultural facilities	2.93	2.94	3.06	2.80	2.98

There were some differences in funding priorities when comparing responses by High Frequency User groups. Respondents who engaged in nature study or environmental education once a week or more (4.70), those that frequently engaged in birdwatching / photography (4.60) and those that frequently visited a natural or wilderness area (4.55) rated *providing habitat and ecosystem preservation* as the most important priority. For those who engage in nature study (4.66) and frequent birdwatchers (4.58), the next most important funding priority was *protecting natural and cultural resources*, followed by *maintaining existing facilities* (4.51 & 4.52 respectively), whereas these priorities were switched in order of importance for those who frequently visit natural and wilderness areas (4.53 & 4.52 respectively). Those who visit local parks with high frequency rated *maintaining existing facilities* as the most important funding priority (4.60), followed by *habitat preservation* and *protecting natural and cultural resources* (4.40). Generally, mean ratings for the High Frequency User groups of visiting and learning activities were higher than the mean ratings of the overall sample of Involved Recreation Users on these items. *Developing new facilities* and *programs* ranked behind preservation and protection for all of these High Frequency User groups, as did *improving technology*.

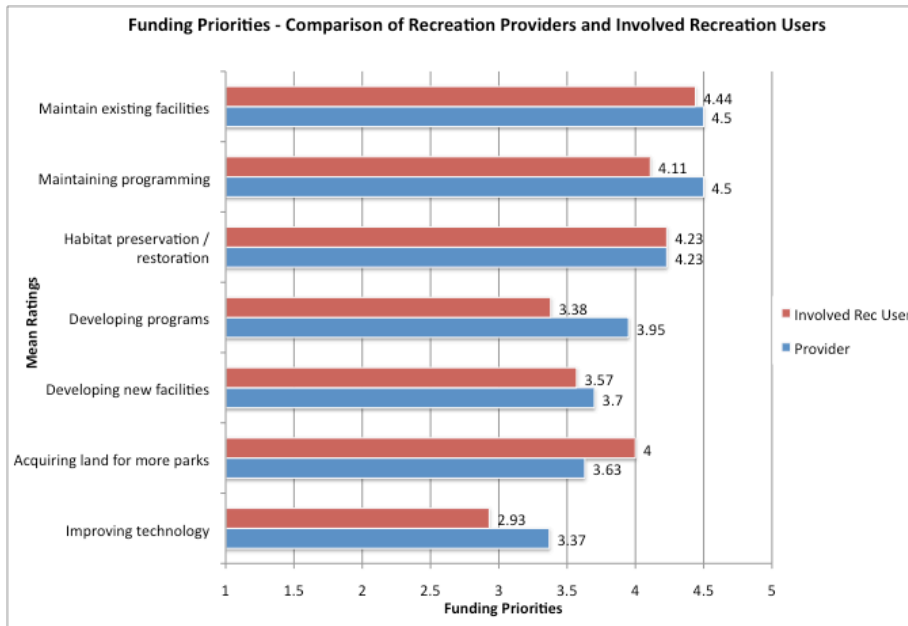
For High Frequency User groups of land-based activities, all groups ranked *maintaining facilities*, and *programs* and *the protection of natural and cultural resources* and *preservation of habitats and ecosystems* as their top 4 priorities, although the rank order of the 4 items by mean ratings vary by activity. All groups except day hikers rated *maintaining existing facilities* as the highest funding priority, whereas day hikers rated *providing habitat and ecosystem protection* (4.50) and *protecting natural and cultural resources, both those open to the public and those that are not* (4.48), as most important followed by *maintaining of existing facilities* (4.46). Those who walk, run or jog at parks or on trails frequently rated *maintaining existing facilities* highest (4.57), followed by frequent day hikers (4.46) and fishermen and women (4.46).

For frequent 4-wheel drivers, hunters, and OHV users, mean ratings on funding items were lower than the overall sample on all items except the *improvement of technology* item. Frequent fishermen and women's mean ratings were similar to those of the sample of Involved Recreation Users overall frequent walkers/joggers/runners and day hikers, means were generally above or similar to the sample mean. Frequent RV campers were below or similar to the sample mean on items indicating that *protecting habitat* (4.09) or *maintaining facilities* and *programs* (4.36) were a priority, but above the sample mean on items indicating that *development of new facilities* (3.88) and *programs* (3.5) and *improvement of technology* (3.48) were higher priorities for this group than for other groups. Frequent RV campers had the highest mean rating for the *improvement of technology* at outdoor recreation and cultural facilities as a funding priority.

Table 42: Funding Priorities by High Frequency User Groups –Arizona Residents - Land and Water-Based Activities: Mean Value

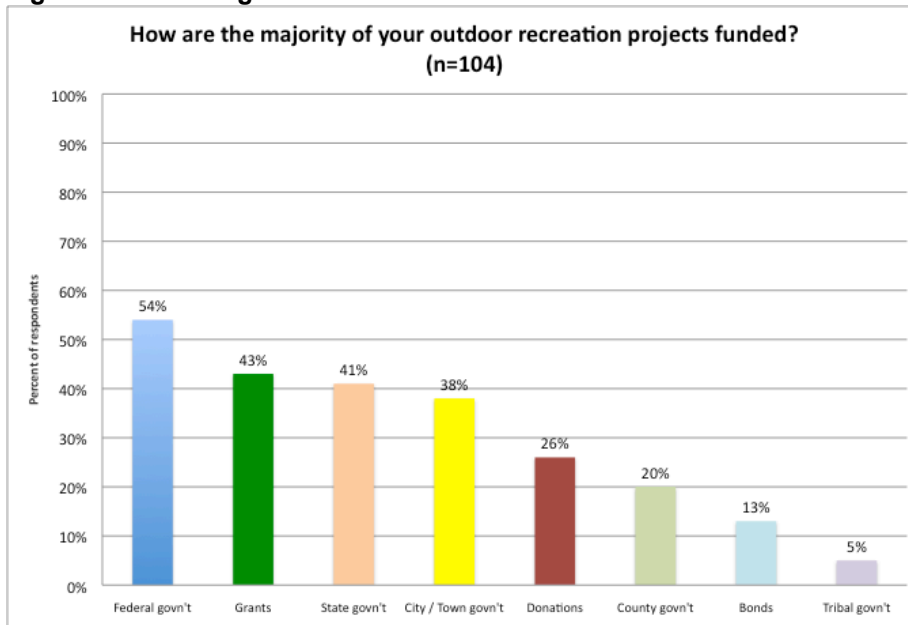
Funding Priorities	Statewide	4-wheel driving (n=224)	OHV use (n=225)	Hunting (n=207)	Day hiking (n=462)	RV camping (n=72)	Walk / jog / run at parks / on trail (n=605)	Fishing (n= 253)
Maintaining existing outdoor recreation or cultural facilities (n=1831)	4.44	4.32	4.28	4.24	4.46	4.36	4.57	4.46
Protecting natural and cultural resources (both those open to the public and those that aren't) (n=1823)	4.23	3.95	3.78	3.90	4.48	4.16	4.46	4.06
Providing habitat and ecosystem preservation or restoration (n=1832)	4.23	3.92	3.75	4.01	4.50	4.09	4.48	4.17
Maintaining existing levels of recreation and cultural education programs (n=1837)	4.11	3.90	3.89	3.88	4.14	4.08	4.28	4.09
Acquiring land for more parks, open space, natural, cultural and recreation areas (n=1830)	4.00	3.79	3.58	3.66	4.24	4.00	4.27	3.97
Developing new outdoor recreation or cultural facilities (n=1823)	3.57	3.55	3.42	3.36	3.54	3.88	3.70	3.70
Developing new recreation or cultural education programs (n=1825)	3.38	3.26	3.13	3.05	3.42	3.58	3.56	3.39
Improving technology at outdoor recreation and cultural facilities (n=1828)	2.93	2.97	3.05	2.81	2.83	3.48	3.06	3.13

Figure 24: Funding Priorities—Provider Compared to Involved Recreation Users – Arizona Residents




*Note: Not all questions were asked similarly on Provider and Involved Recreation User surveys, therefore only those items that allowed a direct comparison were included in the chart.

Recreation providers were asked a slightly different version of the funding categories (on a scale of 1 *Not important* to 5 *Extremely important*). Responses on the funding priorities are shown in Tables XX and XX. Many funding categories rated very high with *operational costs* (4.50), *maintaining existing levels of recreation and interpretive education programming* (4.50), *habitat preservation and restoration* (4.23) and *training for staff, volunteers and Friends groups* (4.02) as the four most important. Providers' responses indicated that *improving technology at outdoor recreation facilities* (3.37) was the least important funding priority. Involved recreation users' rankings similarly rated improving technology at outdoor recreation sites as the lowest priority of those provided (2.93).

Figure 25: Funding Sources—Providers**Other funding sources:**

- Dedicated funds, such as from tribal gaming revenue,
- Funding through taxes such as dedicated sales taxes, excise taxes on outdoor recreation equipment, and taxes on motor fuel
- User or Program fees, including entrance fees, program fees, etc
- Individual Donations
- Licenses and registrations such as hunting and fishing licenses, watercraft registrations, OHV sticker revenue
- Grants, such as the Heritage Fund
- Other sources such as the University, students, or community funding

Table 43: Funding Priorities—Providers

Funding Category	Not at all important					Extremely important	Mean
	1	2	3	4	5		
Operational costs for existing facilities (n=105)	1.0%	1.0%	6.7%	29.5%	61.9%		4.50
Maintaining existing levels of recreation and interpretive education programs (n=104)	1.0%	1.0%	8.7%	26.0%	63.5%		4.50
Habitat preservation or restoration (n=105)	1.0%	3.8%	16.2%	29.5%	49.5%		4.23
Training for staff, volunteers and friends groups (n=104)	0.0%	4.8%	20.2%	43.3%	31.7%		4.02
Monitoring of prehistoric and historic sites (n=104)	4.8%	6.7%	14.4%	32.7%	41.3%		3.99
Developing new recreation and interpretive education programs (n=105)	0.0%	7.6%	21.9%	38.1%	32.4%		3.95
Environmental or cultural studies, clearances and permits (n=105)	6.7%	5.7%	25.7%	26.7%	35.2%		3.78
Developing new outdoor recreation facilities (n=106)	1.9%	14.2%	24.5%	31.1%	28.3%		3.70
Acquiring land for more parks, open space, natural areas and recreation areas (n=104)	11.5%	7.7%	20.2%	26.9%	33.7%		3.63
Improving technology at outdoor recreation facilities (n=105)	5.7%	15.2%	32.4%	29.5%	17.1%		3.37

Both Providers (4.50) and the Involved Recreation Users (4.44) saw *maintenance of existing facilities* as the top priority need, but the two groups differed on the number two need, with the public choosing *protecting natural and cultural resources* (4.23) and the *habitat and ecosystem preservation* (4.23), whereas Providers indicated that *maintaining programming* (4.50) was tied as the first priority for funding and secondary in importance was *habitat preservation* (4.23). The Involved Users did, however rate *maintaining programs* (4.11) as the third priority, therefore the rankings of Providers and Involved Recreation Users are quite similar in terms of top priorities, if not exact rank order.

As recreation needs and interests change and providers seek to include underrepresented groups and broaden interest beyond traditional users, Providers were asked to indicate the importance of meeting the needs of specific groups that may require special programs, accommodations, or allocation of resources (on a scale of 1 *Not important* to 5 *Extremely important*). Mean ratings indicate that *meeting the needs of families* (4.34) was the top priority followed closely by *meeting the needs of children* (4.33). *Meeting the needs of visitors with a disability* (4.06) was ranked third, followed by *meeting the needs of teenagers* (4.03) and *seniors* (3.96).

Table 44. Importance of Meeting the Needs of Specific Groups–Providers



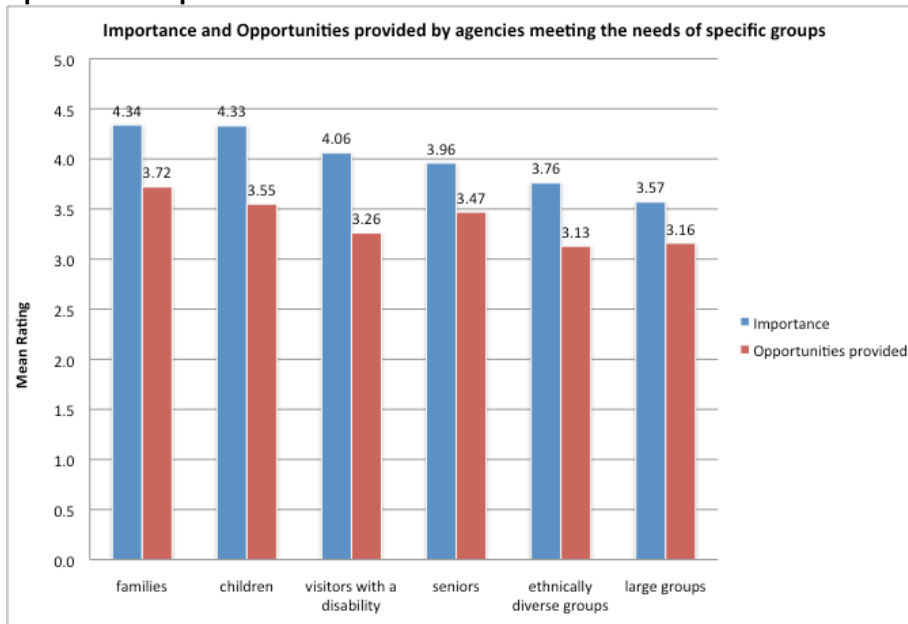
Specific groups	Not at all important					Extremely important	Mean
	1	2	3	4	5		
Meeting the needs of families (n=102)	0.0%	3.9%	13.7%	26.5%	55.9%		4.34
Meeting the needs of children (n=102)	0.0%	3.9%	11.8%	31.4%	52.9%		4.33
Meeting the needs of visitors with a disability (n=102)	0.0%	6.9%	25.5%	22.5%	45.1%		4.06
Meeting the needs of teenagers (n=102)	0.0%	7.8%	25.5%	22.5%	44.1%		4.03
Meeting the needs of seniors (n=102)	1.0%	7.8%	24.5%	27.5%	39.2%		3.96
Meeting the needs of ethnically diverse groups (n=102)	3.9%	12.7%	23.5%	22.5%	37.3%		3.76
Meeting the needs of large groups (n=102)	0.0%	11.8%	43.1%	21.6%	23.5%		3.57

Table 45. Opportunities Provided by my Agency for Specific Groups–Providers

Specific groups	Not at all					Very much	Mean
	1	2	3	4	5		
Meeting the needs of families (n=102)	1.0%	8.2%	31.6%	35.7%	23.5%		3.72
Meeting the needs of children (n=98)	2.0%	14.3%	30.6%	32.7%	20.4%		3.55
Meeting the needs of seniors (n=98)	4.1%	11.2%	35.7%	31.6%	17.3%		3.47
Meeting the needs of visitors with a disability (n=98)	4.1%	17.3%	38.8%	28.6%	11.2%		3.26
Meeting the needs of large groups (n=98)	3.1%	17.3%	50.0%	19.4%	10.2%		3.16
Meeting the needs of ethnically diverse groups (n=98)	9.2%	20.4%	37.8%	13.3%	19.4%		3.13
Meeting the needs of teenagers (n=98)	4.1%	25.5%	40.8%	15.3%	14.3%		3.10

Providers were also asked whether opportunities for the groups identified above were provided by their agencies (on a scale of 1 *Not at all* to 5 *Very much*). Providers mean ratings suggest that there are more opportunities provided by agencies *meeting the needs of families* (3.72), and *children* (3.55). Mean ratings for the rest of the identified groups round to 3 on a 5 point scale, indicating a moderate number of opportunities are available from agencies for these groups.

Figure 26: Mean Ratings of Importance and Opportunities Provided by my Agency for Specific Groups–Providers

Similar to Providers, Involved Recreation Users mean ratings suggest that *meeting the needs of families* (4.04) was the most important priority, followed by *providing low-cost opportunities* (4.00) (an item which was not included on the Provider survey), *meeting the needs of children* (3.82), *visitors with a disability* (3.63), *teenagers* (3.61) and *seniors* (3.60) (on a scale of 1 *Not important* to 5 *Extremely important*).

Table 46: Importance of Meeting the Needs of Specific Groups– Arizona Residents

Specific groups	Not at all important	←————→				Extremely important	Mean
	1	2	3	4	5		
Meeting the needs of families (n=1824)	2.8%	4.0%	19.7%	33.4%	40.1%		4.04
Providing low cost opportunities (n=1831)	3.5%	4.6%	19.4%	33.0%	39.5%		4.00
Meeting the needs of children (n=1821)	3.8%	6.2%	25.8%	32.7%	31.6%		3.82
Meeting the needs of visitors with a disability (n=1824)	4.4%	10.0%	29.6%	30.4%	25.7%		3.63
Meeting the needs of teenagers (n=1829)	4.9%	9.0%	30.8%	30.6%	24.8%		3.61
Meeting the needs of seniors (n=1835)	4.0%	9.8%	31.4%	31.8%	23.0%		3.60
Meeting the needs of large gatherings or parties (n=1826)	13.0%	22.8%	39.1%	18.3%	6.7%		2.83
Meeting the needs of ethnically diverse groups (n=1834)	31.5%	16.1%	25.1%	16.1%	11.3%		2.60

In addition, Involved Users identified some other groups whose needs should be taken into consideration. The groups are:

Table 47. Other Specific Groups identified by Involved Recreation Users

User / activity interest groups	33
Hunting/ hunters	7
Pet owners	3
Fishermen	3
Endurance athletes / triathletes	2
Equestrian uses	2
Mountain bikers	2
OHV/ORV community – fewer restrictions	2
Road cyclists / cyclists	2
Boy Scouts of America	1
Conservation oriented 4x4 off-road groups	1
Firearm enthusiasts	1
Motorized use areas for families	1
Non-motorized user needs	1
Physically fit hikers who seek longer hikes	1
Professional & amateur astronomers	1
Sportsmen	1
Open water swimming	1
Various clubs & organizations	1
No need to cater to specific groups	17
Maintain facilities / access / safety first	10
Maintain safe facilities	4
Maintain clean facilities (e.g., bathrooms)	3
Maintain access (e.g., forest roads)	1
Maintain existing facilities	1
Citizen groups	13
Low income	4
Families	2
Seniors	2
All groups considered equally	1
Arizona residents	1
Communities	1
Include instructions in other languages at facilities	1
Military – active & retired	1
Preserving undeveloped open-space will serve all groups	8
Meeting needs of the environment / ecosystems / wildlife	7
Protect funding for recreation resources	1
Don't like survey items	1

Note: Shaded rows are major categories & number comments if there are no subcategories. Unshaded rows are subcategories and number of comments.

CHANGES TO OUTDOOR RECREATION IN THE LAST FIVE YEARS

Providers and Arizona resident Involved Recreation Users were also asked to identify changes to outdoor recreation within the last five years. Specifically, Providers were asked if there has been a demographic shift in visitors to their sites within the last five years. Three out of five (59%) said that there had been no changes, while 41% said there had been noticeable shifts. Providers were asked, in an open-ended question to identify the shifts they have seen.

Changes in awareness of land ethic (2 comments)

- One comment noted that there has been less use of sites by irresponsible users, another comment stated that as demographic shifts occur, there is an increased need for education about land ethics, including camping and fire restrictions, and litter removal expectations.

Changes in income: (3 comments)

- One comment reported that the median income of users has decreased. Another comment stated that the recession, unemployment and increased cost of fuel has resulted in less use of State Trust Land sites by volunteers and vehicle users. Finally, one comment reported that there has been an increase in the use of sites by individuals from lower income categories.

Prefer different kinds of activities: (4 comments)

- Some respondents reported that there has been a change in the way that visitors are utilizing recreation sites. For example, one comment stated that users (including families, ethnically and culturally diverse groups and large groups) have expressed an interest in more winter recreation opportunities. Two comments stated that there has been an increase in use of trails by mountain bikers, one added that although this includes bikers of all ages, that this is the case especially for those between the ages of 20 and 40. One of these comments noted that the increased use of trails by mountain bike riders corresponded with a decrease in trail use by hikers and equestrian riders. Finally, one comment noted an increase in use of site by RV campers due to more electrified sites being available.

Clientele have gotten older: (3 comments)

- Three comments noted that the average age of users has increased at sites managed by respondents. One comment stated that the average age of current users is approximately 48 while another said that their primary audience is in their 50's.

Younger clientele: (6 comments)

- Other respondents noted that younger clientele are using their sites as compared to five years ago. For example, two comments noted that college students are becoming more involved and using resources more, and another noticed more high school students participating as well. Other comments didn't specify a particular age group, but commented that there are younger users accessing trails and other resources. One respondent comment noted that younger unsupervised users have increased in motorized trail use. Finally, one respondent stated that there are fewer young people at the site (s)he manages.

Singles: (1 comment)

- One comment stated that there has been an increase in the use of resources by singles.

Families: (7 comments)

- Three respondents commented that families are using resources (e.g., camping and picnicking) more than in the past. Another comment stated that there has been more use by single-parent families and one other comment noted an increase in use by younger families. One respondent reported that there has been more use by families from out of town who have higher expectations, and another that families are visiting sites in larger groups than in the past.

Youth: (3 comments)

- One respondent stated that there have been more youth involved in service projects at her/his site, while another reported an increase in use by youth groups. However, one comment indicated that there are not as many young children (ages 3-5) attending programs as in years past

Diversity: (21 comments)

- Six comments reported an increase generally in the ethnic diversity of users at recreation sites than in the past. Six comments reported that there has been an increase in use by Latino/a visitors, and 3 comments reported an increase in use by Native-American visitors. Others reported that there has been more use by non-English speakers (3 comments), those from an urban environment (2 comments), more diversity in the ages of users (1 comment), and more use of visitors from foreign countries whose customs may be different (1 comment). Other comments indicated that there was more people generally at the recreation site (1 comment), and another reported an increase in new visitors to a site (1 comment). However, one comment noted that since SB1070 passed, there has been less visitation by Latino/a groups and another reported less use of sites by non-recreation users. Some of the comments noted that differences in customs of international visitors, differences in land use, and language barriers may contribute to challenges for land managers.

More seniors: (5 comments)

- Five comments stated that there was more use of resources and programs by seniors. One respondent noted that seniors wanted more programs than can be offered. Another noted that there are more seniors involved in recreation programs as compared to human service programs. Another statement reported an increase in the number of senior groups that visited sites. Another provider noted that there has been an increase in the number of affluent older visitors who desire guided adventures. Finally, another comment stated that there are more seniors visiting sites with RV's and OHVs. One statement however, reported that the use of sites by seniors has decreased.

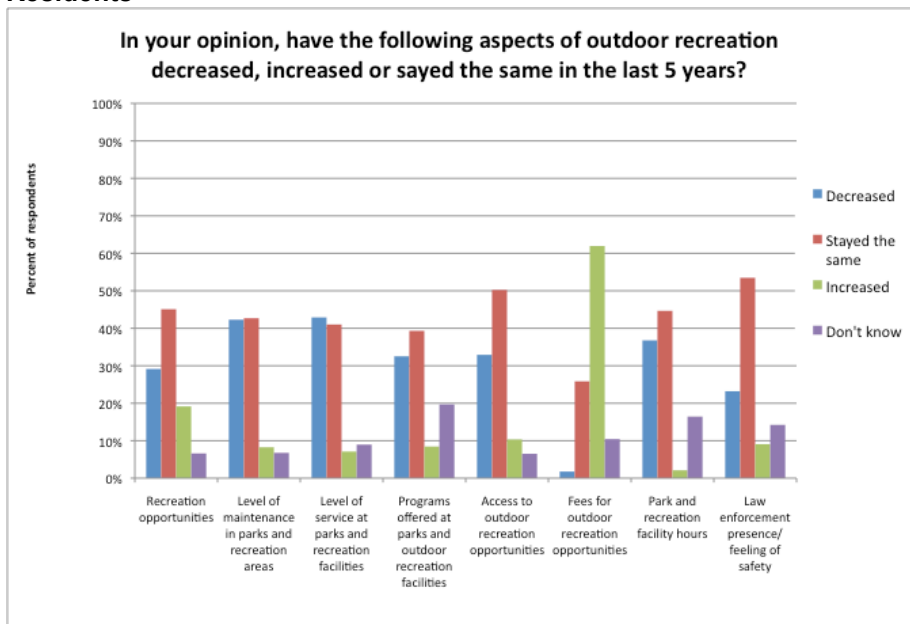
Population we serve has decreased: (1 comment)

- One respondent noted that there has been a decrease in the population of users.

One of the goals of the 2013 SCORP is to identify changes to outdoor recreation experiences during the last five years from the perspectives of both Providers and Arizona resident Involved Recreation Users. Involved Recreation Users were asked if their recreation experiences have changed in the last five years, and if so, which aspects have been affected. Almost two-thirds reported that *fees for outdoor recreation opportunities* had increased. Over 40% of Involved Users reported the *levels of maintenance* and *service at parks and recreation facilities* decreased in the last five years, whereas approximately the same percent reported no change in these aspects of their parks and recreation experience. Approximately one-half (45%-53%) of Involved Users reported that *recreation opportunities*, *access to outdoor recreation opportunities* and *law enforcement presence and their feelings of safety* stayed the same during the last 5 years, whereas between 23%-33% stated that they had noticed decreases in these aspects of their recreation experiences.

Involved Users who had an Arizona residence were also asked to identify the biggest changes that the economic recession had upon their outdoor recreation experiences in Arizona. The most common comment categories indicated that due to the cost of fuel, park closures and less overall income, respondents recreated less. The next most common categories suggested that Involved Users noticed less facility maintenance at outdoor recreation sites, that there was an increase in fees at recreation sites, while others perceived no difference in their experiences. Still others noted that some of the legislative decisions made during the last five years showed that legislators don't value outdoor recreation opportunities and facilities in Arizona. Fewer comments noted that there had been a lack of enforcement due to agency reductions, while others stated that Forest Service roads had been closed impeding recreationists' access.

Figure 27: Changes in Recreation Experiences Within the Past Five Years – Arizona Residents



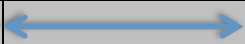
OUTDOOR RECREATION ISSUES

Understanding the perceptions of Involved Users who have a residence in Arizona, in terms of recreation issues is a large area of concern for recreation planners and providers. In the Involved User survey, respondents were asked how strongly they agreed or disagreed with nine statements about outdoor recreation and related issues including user conflicts and access (on a scale of 1 *Strongly disagree* to 5 *Strongly agree*).

The top two rated statements show conflicting perspectives from Involved Users regarding current recreation issues. The statement with the highest mean (out of 5) agreement is *The parks and recreation areas in my community are generally well-maintained* (3.57) followed closely by *Recent budget cuts to parks and recreation providers have had a negative impact on outdoor recreation experiences in my area* (3.51). Since users perceive a negative impact on their recreation experience due to budget cuts, it is assumed from their responses that the negative impact is not due to maintenance of the parks. Future research would be valuable to understand in greater depth specifically how budget cuts have negatively impacted the experience. The results also show that Involved Users are more ambivalent with the access to and amount of parks in their communities. Both these issued scored in the middle of the scale: *Access to the public outdoor recreation lands in my area is adequate* (3.20) and *I am satisfied with the number of parks, open spaces, natural areas and playgrounds in my community* (3.18).

The least level of agreement among all respondents is with the statements, *In general, people have sufficient knowledge and awareness about the natural environment* (2.16) and *Providing recreation activities is more important than protecting natural and cultural resources* (2.21). These responses may be related to the fact that mainly Involved Users received and responded to the survey, a comparison to the general Arizona public who may or may not engage in outdoor recreation is not available.

Table 48. Outdoor Recreation Issues – Arizona Residents

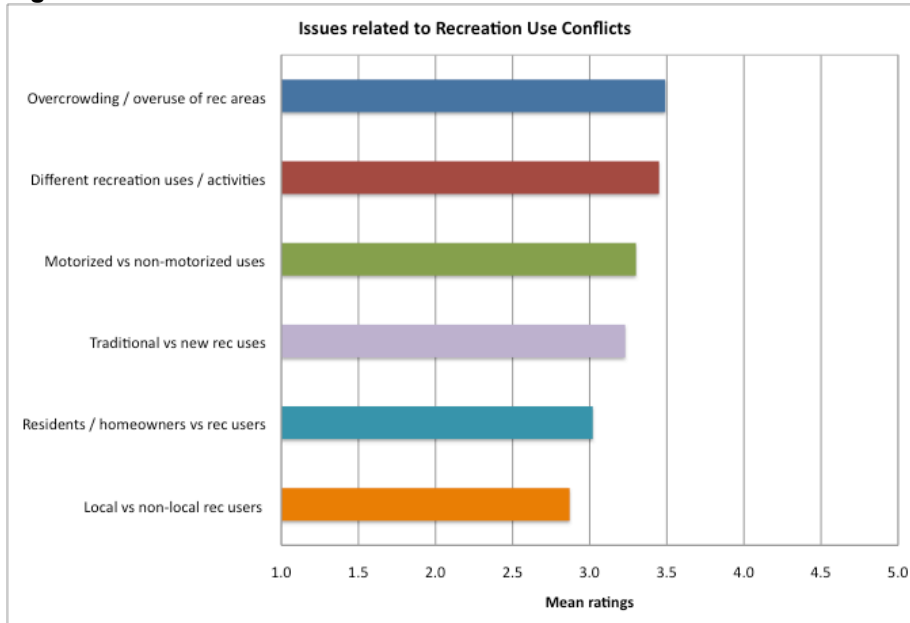
Level of Agreement with Issue Statement	Strongly Disagree				Strongly Agree	Mean
	1	2	3	4	5	
The parks and recreation areas in my community are generally well-maintained	3%	8%	33%	41%	15%	3.57
Recent budget cuts to parks and recreation providers have had a negative impact on outdoor recreation experiences in my area	8%	13%	28%	24%	28%	3.51
Access to the public outdoor recreation lands in my area is adequate	10%	16%	32%	30%	13%	3.20
I am satisfied with the number of parks, open spaces, natural areas and playgrounds in my community	8%	17%	34%	29%	12%	3.18
My outdoor recreation experiences are often negatively impacted by other recreation users	11%	24%	33%	20%	12%	2.98
There is a lack of recreation opportunities in my area for people with special needs	14%	23%	46%	12%	5%	2.70
Conflicts between homeowners and recreation users are a problem in my area	24%	29%	28%	12%	7%	2.49
Providing recreation activities is more important than protecting natural and cultural resources	34%	28%	26%	8%	5%	2.21
In general, people have sufficient knowledge and awareness about the natural environment	29%	38%	23%	7%	3%	2.16

Since respondents to the Involved User survey were contacted through their affiliation with various outdoor recreation agencies, it is important to understand if differing user groups rated the outdoor recreation issues differently. Table 41 reports agreement for all respondents along with respondents who participated frequently (once a week or more) in OHV use, hunting, hiking, fishing and birding or photography separately. Overall, there are not major differences among users groups perception of outdoor recreation issues.

Table 49: Outdoor Recreation Issues By High Frequency User Groups – Arizona Residents

Outdoor Recreation Issue Statement	All Respondents	High Use - OHV	High Use - Hunting	High Use - Day hiking	High Use - Fishing	High Use - Birding or Photography
	Mean Agreement with each Statement (out of 5)					
The parks and recreation areas in my community are generally well-maintained	3.57	3.49	3.41	3.69	3.43	3.64
Recent budget cuts to parks and recreation providers have had a negative impact on outdoor recreation experiences in my area	3.51	3.42	3.30	3.70	3.75	3.77
Access to the public outdoor recreation lands in my area is adequate	3.20	2.89	2.96	3.34	3.08	3.26
I am satisfied with the number of parks, open spaces, natural areas and playgrounds in my community	3.18	3.23	3.35	3.20	3.17	3.11
My outdoor recreation experiences are often negatively impacted by other recreation users	2.98	2.98	3.18	3.02	3.17	3.02
There is a lack of recreation opportunities in my area for people with special needs	2.70	2.68	2.59	2.63	2.72	2.77
Conflicts between homeowners and recreation users are a problem in my area	2.49	2.75	2.73	2.55	2.51	2.58
Providing recreation activities is more important than protecting natural and cultural resources	2.21	2.73	2.37	2.00	2.34	1.85
In general, people have sufficient knowledge and awareness about the natural environment	2.16	2.42	2.24	1.95	2.27	1.87

Providers were also asked, in more detail, about recreation use conflicts. All mean ratings on the items which assess recreation use conflicts rounded to a 3 on a 5 point scale (means were between 2.51 and 3.49), indicating that on average, Providers neither disagree nor agree with these statements. The highest mean rating was for the item assessing the extent to which *overcrowding and overuse of recreation areas is a problem at the sites my agency manages* (53% agreement; 3.49). The second and third highest mean ratings indicate that Providers experience conflicts between *different recreation uses/activities* (3.45) and *between motorized and non-motorized uses* (3.30) on the lands they manage. Mean ratings indicate that *conflicts between local and non-local recreation* (2.87) were not as much of an issue for Providers. Only 26.8% of Providers agreed with this statement.

Figure 28. Outdoor Recreation Issues—Recreation Use Conflicts - Providers**Table 50. Issues Related to Recreation Use Conflicts—Providers**

Recreation User Conflicts	Strongly disagree 1	Disagree 2	Neither disagree nor agree 3	Agree 4	Strongly agree 5	Mean
Overcrowding / overuse of recreation areas is a problem at the sites my agency manages (n=98)	4.1%	17.3%	25.5%	31.6%	21.4%	3.49
Conflicts between different recreation uses / activities is a problem at the sites my agency manages (n=98)	5.1%	15.3%	19.4%	50.0%	10.2%	3.45
Conflicts between motorized and non-motorized uses is a problem at the sites my agency manages (n=97)	10.3%	15.5%	22.7%	37.1%	14.4%	3.30
Conflicts between traditional recreational uses and new recreational uses is a problem at the sites my agency manages (n=98)	5.1%	19.4%	30.6%	36.7%	8.2%	3.23
Conflicts between residents / homeowners and recreation users is a problem at the sites my agency manages (n=97)	11.3%	20.6%	25.8%	39.2%	3.1%	3.02
Conflicts between local recreation users and non-local (visiting) recreation users is a problem at the sites my agency manages (n=97)	5.2%	30.9%	37.1%	25.8%	1.0%	2.87

Providers agreed on average with almost all of the items assessing law enforcement issues (means of 3.51 and above, on a scale of 5). The highest mean rating indicates that Providers agree that *there is a need for user education of laws and regulations regarding recreation activities on the sites that their agencies manage* (3.99). The second highest ranked item suggests that *vandalism* is an issue (82.5% agreement; 3.95), as is the item with the third highest mean rating, which addresses the extent to which *litter decreases the enjoyment of visitors* at sites managed by providers (72.1% agree; 3.81). Providers neither disagree nor agree on average that *their agency adequately enforces the*

protection of park and recreation resources that their agencies manage (34.4% agreement; 2.89). However, it is unclear whether this is due to staffing and funding deficiencies or for other reasons. Further clarification of these issues would be helpful in the future.

Table 51. Issues Concerning Law Enforcement and Safety – Providers

Law Enforcement Issues	Strongly disagree 1	Disagree 2	Neither disagree nor agree 3	Agree 4	Strongly agree 5	Mean
There is a need for user education of laws and regulations regarding recreation activities on the parks and recreation areas that my agency manages (n=97)	4.1%	2.1%	14.4%	49.5%	29.9%	3.99
Vandalism is an issue in parks and recreation areas my agency manages (n=97)	2.1%	7.2%	8.2%	58.8%	23.7%	3.95
Too much trash or litter impacts visitor enjoyment in the parks and recreation areas my agency manages (n=97)	4.1%	10.3%	13.4%	44.3%	27.8%	3.81
Law enforcement for illegal activities is an issue in parks and recreation areas my agency manages (n=97)	4.1%	8.2%	21.6%	35.1%	30.9%	3.80
My agency adequately enforces the protection of park and recreation resources in the areas that my agency manages (n=96)	8.3%	36.5%	20.8%	27.1%	7.3%	2.89

Providers were asked how much they agree or disagree (on a scale of 1 *Strongly disagree* to 5 *Strongly agree*) with the following seven statements concerning resource protection. Providers agreed on average with three of the 7 items. Providers agree that *one of the goals of their agency is sustainability of natural and cultural resources* (82.1% agreement; 4.17), that *their agency has adequate laws or policies to protect these resources* (68.1% agreement; 3.73), and *their agency limits recreation development to protect these resources* (58.5% agreement; 3.60). However, they neither disagreed nor agree with the rest of the statements, on average. The two items with the lowest mean ratings indicate that Providers disagree, on average, that their agencies believe that *providing for recreation use* (2.44) or *revenue generation* (2.32) is more important than *resource protection*. This is interesting, as two-thirds of Involved Users indicate that fee increases have taken effect, however Providers don't perceive that revenue generation is taking place at the expense of nature and cultural resource protection.

Table 52: Issues Concerning Resource Protection – Providers

Resource Protection Issues	Strongly disagree 1	Disagree 2	Neither disagree nor agree 3	Agree 4	Strongly agree 5	Mean
One of the goals of my agency is sustainability of natural and cultural resources (n=95)	0.0%	2.1%	15.8%	45.3%	36.8%	4.17
My agency has adequate laws or policies to protect natural and cultural resources (n=94)	1.1%	10.6%	20.2%	50.0%	18.1%	3.73
My agency limits recreation development to protect natural and cultural resources (n=94)	1.1%	8.5%	31.9%	46.8%	11.7%	3.60
My agency limits recreation use to protect natural and cultural resources (n=96)	2.1%	16.7%	27.1%	42.7%	11.5%	3.45
Natural and cultural resources are being degraded or impacted by recreational uses at the sites my agency manages (n=96)	6.3%	25.0%	22.9%	37.5%	8.3%	3.17
My agency believes that providing for recreation use is more important than resource protection (n=96)	17.7%	35.4%	34.4%	10.4%	2.1%	2.44
My agency believes that providing for revenue generation is more important than resource protection (n=96)	27.1%	33.3%	24.0%	11.5%	4.2%	2.32

INVOLVEMENT IN OUTDOOR RECREATION ISSUES

The Involved User survey also sought to understand how involved users are in outdoor recreation issues beyond participation in activities. The survey asked individuals about their affiliation or membership to outdoor recreation organizations and about their past volunteerism and willingness to volunteer in the future.

Outdoor Recreation Organization Affiliations

The survey asked respondents if they were affiliated with any outdoor recreation organizations, 40% of respondents had at least one affiliation. A follow-up question asked them the name the organization(s). A total of 747 respondents provided a specific organization, many respondents listed multiple organizations. The organizations were coded into similar categories.

The top ten affiliation categories listed below in descending order are:

- **Wildlife Conservation Associations – Game** (i.e. Rocky Mountain Elk Foundation, Ducks Unlimited)
- **Shooting Associations** (i.e. National Rifle Association) & **Sportsmen Associations** (i.e. Yuma Rod and Gun Club, Southeastern Arizona Sportsmen's Club)
- **Land and Resource Advocacy Associations** (i.e. Sierra Club, Arizona Wilderness Coalition)

- **Public Land Agency mentions** (i.e. Arizona Game and Fish Department, Forest Service)
- **Wildlife Conservation Associations – Nongame** (i.e. Audubon Society, World Wildlife Fund)
- **Land Trusts** (i.e. Nature Conservancy, Trust for Public Land)
- **Trail Related Associations** (i.e. Sonoran Desert Mountain Bicyclists, Arizona Trail Association)
- **Youth Related Associations** (i.e. Boy Scouts of America, Be Outdoors Arizona)
- **Off-Highway Vehicle Associations** (i.e. Arizona Off-Road Coalition, Arizona State Association of 4-WD)
- **River Recreation Associations** (i.e. Desert Paddlers, Grand Canyon River Guides)

As mentioned previously, the Involved User sample seems to be strongly influenced by the hunting and fishing populations. This may be due to the survey simply being completed more by these populations but may also give insight into which populations are more active in outdoor recreation related issues.

To better understand the specific affiliations most common to the survey sample, the most frequently reported affiliations are listed in Table 45.

Table 53. Top 20 Member Affiliations/Memberships Reported

Outdoor Recreation Affiliation	Frequency
Rocky Mountain Elk Foundation	113
National Rifle Association	92
Sierra Club	48
Arizona Game and Fish Department	38
Arizona Elk Society	32
Audubon Society	31
Ducks Unlimited	27
Nature Conservancy	27
TRACKS	24
Arizona Desert Bighorn Sheep Society	22
Trout Unlimited	21
Tucson Audubon	21
Boy Scouts of America	20
Arizona Trail Association	19
Good Sam	17
Sonoran Desert Mountain Bicyclists	17
Southern Arizona Hiking Club	10
Southern Arizona Paddling Club	10
Meetup.com (various outdoor activities)	8
American Birding Association	7

Volunteerism

Respondents were also asked if they had volunteered for any parks and recreation organizations in the past five years. Thirty percent of respondents indicated they had volunteered in the past five years (see Figure 16). A follow-up question of how likely it would be for the respondent to volunteer in the next year was asked, answers showed no clear indication of future likelihood of volunteering (see Figure 17).

Figure 29. Volunteerism in the Last 5 Years – Involved Recreation User

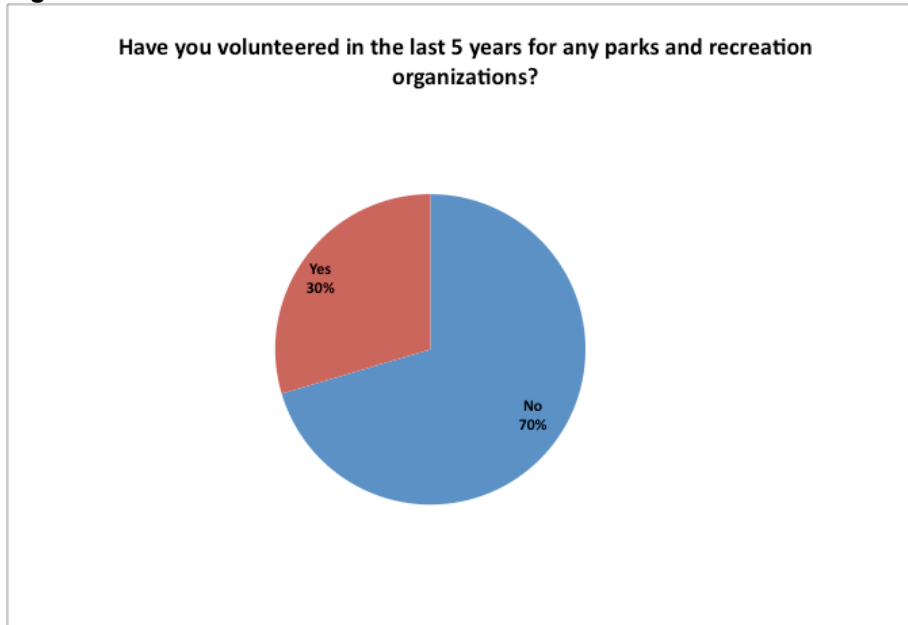
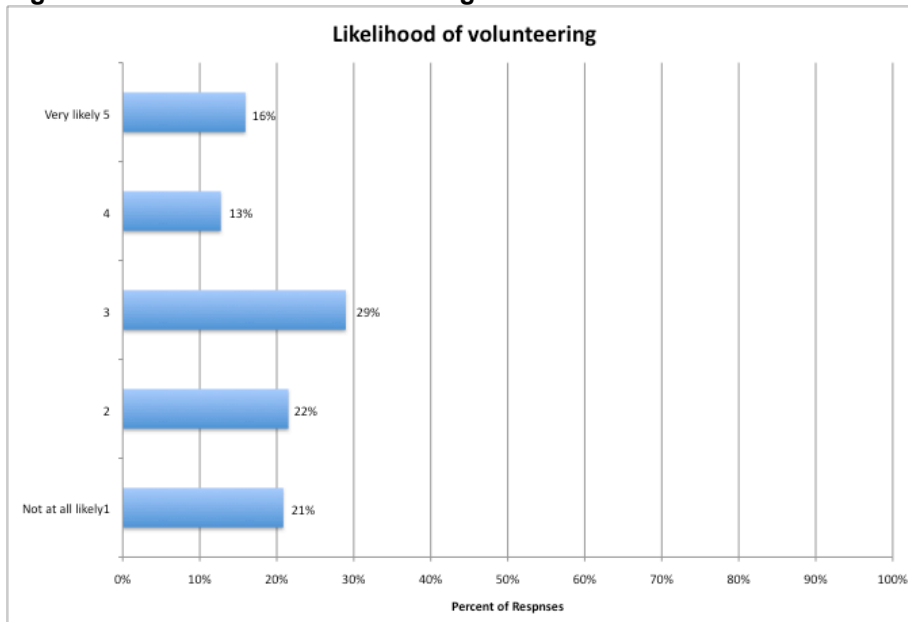


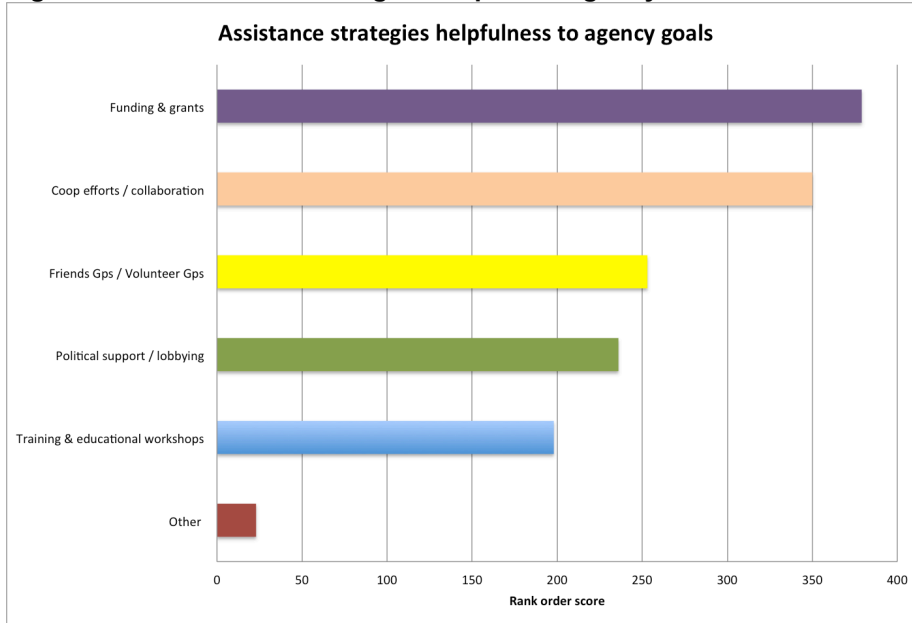
Figure 30. Likelihood of Volunteering in the Next Year – Involved Recreation User



Assistance Strategies and Data Needs

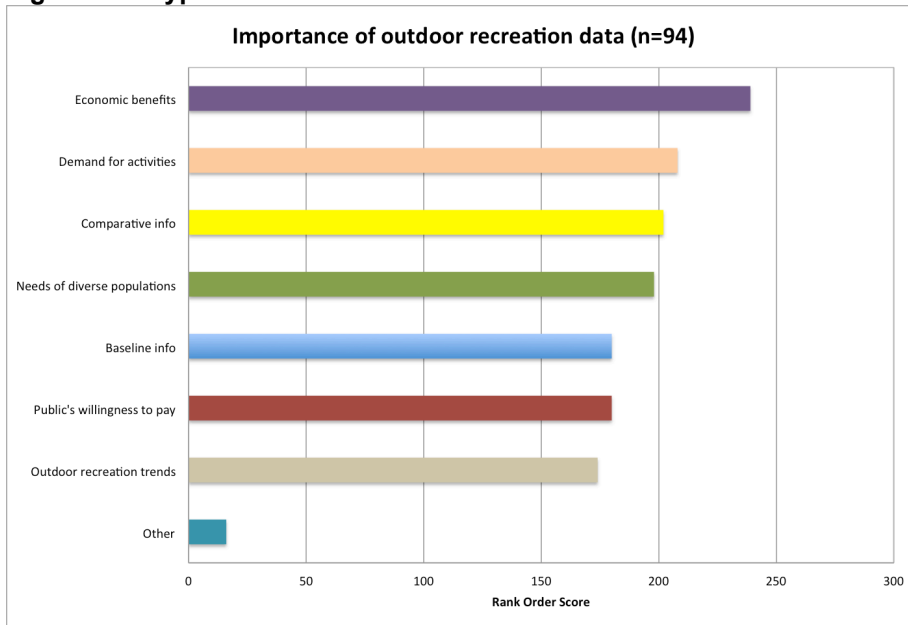
Providers were asked to rank the helpfulness of the following four types of assistance strategies from most helpful to least helpful. Rank order scores were calculated taking into account how many times each response was chosen as a first priority, second priority and so on. Scores indicate that overall, *assistance for funding, grants and cooperative efforts* were perceived to be more helpful than *Friends groups* or *volunteer groups*, *political support and lobbying* or *training and educational workshops*. The most important assistance strategies were consistent with information from the 2008 SCORP.

Figure 31: Assistance Strategies Helpful to Agency Goals – Providers



Other assistance strategies identified were major donor identification and recruitment, stable, increased funding, and political support for the agency to enforce the laws, rules and regulation currently on the books. One respondent also noted that their organization had given up on lobbying.

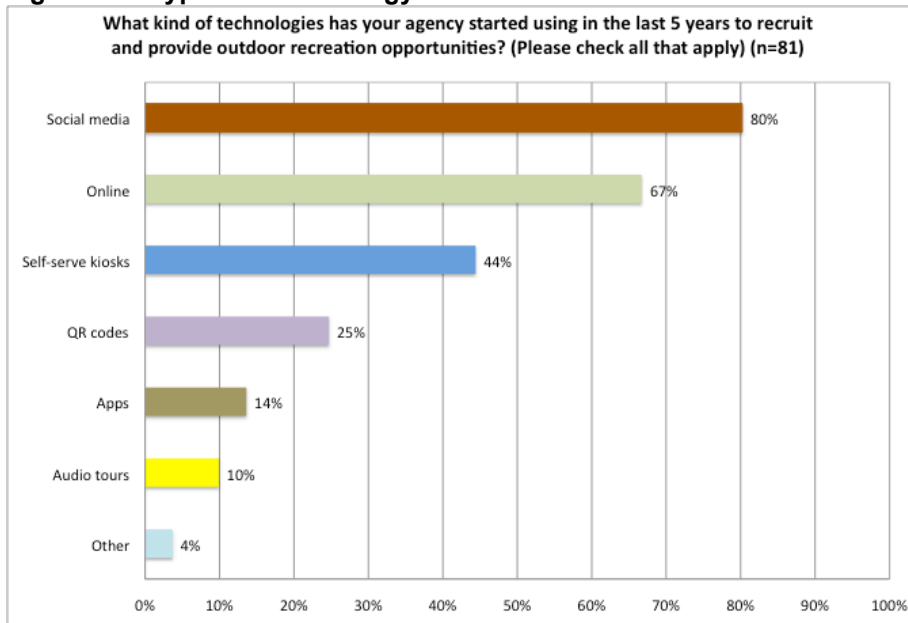
Outdoor recreation providers need data to understand the outdoor recreation needs of the public. When asked what types of data would be helpful, Providers indicated that data on a number of topics related to recreation management is desired. Data on *economic benefits*, *demand for outdoor recreation opportunities*, and *comparative information from land managers and recreation providers* was ranked as more important than data on *outdoor recreation trends*, *public's willingness to pay*, and *baseline information on natural and cultural resources / land*. One other type of important data reported was low impact camping education.

Figure 32: Types of Data Needed – Providers

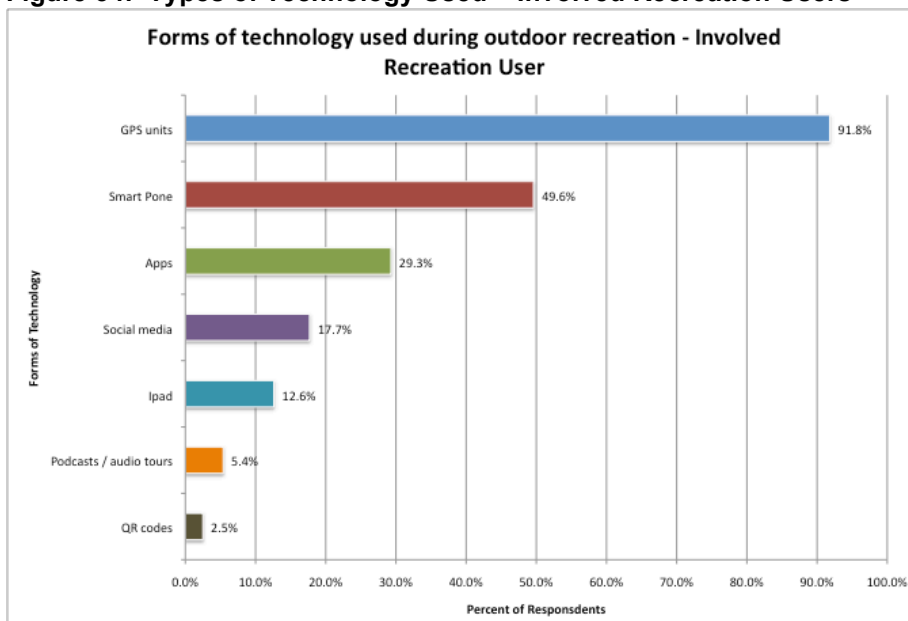
Technology Use by Providers

Arizona providers were asked to identify types of technology that their agency uses to recruit and provide outdoor recreation opportunities for the public. Eight in ten providers reported that their agency is using *social media* and two-thirds of the sample reported that their agency is *online*. More than two out of five agencies use *self-serve kiosks* while approximately one-quarter use *QR codes*.

Other technology that providers reported their agencies using were: an established website for information transfer, low watt radio station for public service sound bites, newspaper and recreation publication, online printable recreation passes and website information.

Figure 33: Types of Technology Used – Providers

Involved Recreation Users use technology in a variety of ways before, during and after recreating: they use the internet both via laptop or desktop computers and mobile devices to search for activities and sites, before and during recreation, and may share their recreation experiences afterward using social media (Outdoor Industry Foundation, 2012). Recreation users were asked whether they use technology while participating in outdoor recreation in Arizona. More than three-quarters (76%) do use technology while recreating, while 21% do not, and 3% didn't know. The chart below indicates that over one-half of respondents (56%) use *GPS units* when recreating outdoors, and approximately one third (31%) use their *smart phones*.

Figure 34: Types of Technology Used – Involved Recreation Users

Those Involved Users that reported using apps were asked which apps they use. The largest category of apps used by respondents were those used to access maps (e.g., Google Earth, topo maps, IMap, etc.). The next largest category used apps for route findings (e.g., compass, gps, back country navigation, etc.) Another large category of users utilized apps for nature identification (e.g., IBird, Audubon or Sibley guides, animal and track id apps, etc.) Many used apps related to specific outdoor recreation activities (e.g., GoSkyWatch for information about astronomy, Trailguru for hiking, Camp Finder for camping, Run Keeper for running, Sterlok Ballistic Calculator for shooting, Endomondo for biking, etc.) A smaller number of respondents used apps to access specific outdoor recreation providers or travel organizations (e.g., Woodall's, AAA, Oh Ranger!, etc.) (A complete list of apps used by Involved Recreation Users will be included in the Final draft of the plan, Appendix XX).

Involved Users who indicated they used Social Media, were asked which sites they used while recreating outdoors. By far the most common answer was Facebook, followed by Twitter. Also mentioned, although not by large numbers of users, were: 4-Square, Flickr, Pinterest and others. Many respondents used social media specifically designed for user groups of particular recreational activities (e.g., AZflyandtie, hikearizona.com, hi8mud.com, Paddle-Arizona, etc.). Others used informational sites while recreating such as Arizona Game & Fish, Arizona State Parks, google maps, local news, forums, etc. Others used social media to keep in contact with friends and family, meet others who share their interests or share their experiences (e.g., meetup.com, blogging, hiking and camping chats, to share photos/blogs, report interesting bird sightings from the field, etc.).

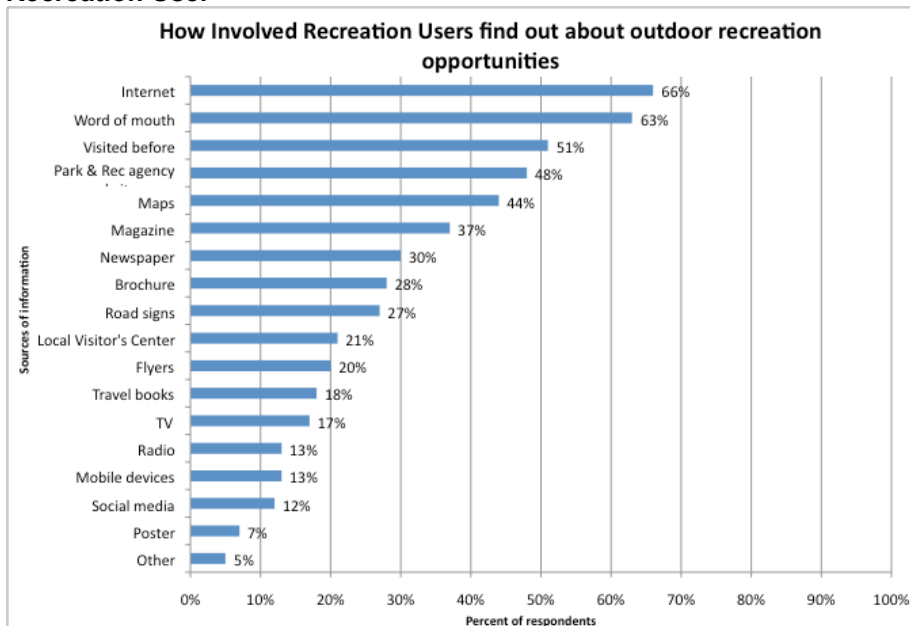
Table 54: Other Technology Sources Used by Involved Recreation Users

Other technology sources used by Involved Recreation Users were:	Frequency
Technology used for communication / safety: cell phones for emergency use, SPOT Satellite Rescue Unit, 2-way radios, Goal Zero Solar Charger	51
Tools to aid in recreation participation: sonar depth finders, fish finders, sunrise charts, digital metal detectors, laser range finders, electronic wildlife calling equipment, motion decoys, and boating electronics	26
Photography / video camera equipment (19 comments): digital photography equipment, trail cameras, video recorders and remote cameras	19
Computer based tools: computer based mapping, (e.g., Google Earth, USFS electronic maps), fishing and stocking reports online, podcasts to be listened to at destination, and online registration for various parks	19
Maps and route finders: topographical maps & compasses, altimeters, GPS units, geo-caching, and lake maps	17
Tools for entertainment & education: Including iPods/MP3 players for music, DVD players, iPod sound files (e.g., bird calls to help identify), & Kindle Fire	14
Computers & laptops: laptop or PC with internet access, trail directions, etc., for GPS tracking and locating, to find things to do, & send photos	14
Social media & blogging: Including Twitter, Facebook, blogging and social media	7
Smart phones: Including iPhone & Android phones	6
Apps: Including Audubon guides, Nike +, IMap, MyHike & Ibird apps	5
Tablets: iPad, Android tablets	5
Tools to provide information: Arizona Fishing Guide Book by AZ Highways, Arizona Game & Fish emails	1

Involved Recreation Users were also asked to indicate all of the different ways in which they gather information about outdoor recreation opportunities in Arizona. Two-thirds

(66%) of responses indicate that Involved Recreation Users heard about outdoor recreation opportunities on the internet. It is important to remember that this sample may be more “connected” than a random sample of the general public, as many of them likely have heard about the SCORP survey online, and also took the survey online, indicating some comfort with online tools, therefore this must be taken into account when interpreting this data. Nearly two-thirds (63%) heard about opportunities through word of mouth, indicating the continued need for excellent customer service, visitor experience and quality programs and events that will generate this positive peer to peer marketing. Slightly over one-half (51%) knew about opportunities because they had visited the site before, and nearly one-half (48%) found out about opportunities from Parks and Recreation agency websites, indicating the need to keep these sites updated. Printed media, materials and collateral (e.g., maps, magazines, newspapers and brochures) were used by 28%-44% of the sample. More than one in ten heard about opportunities through mobile devices (13%) and social media (12%), the same amount as heard about these opportunities through the radio (13%), and slightly less than heard about opportunities on TV (17%). (See figure 22 below).

Figure 35: Sources of Information for Outdoor Recreation Opportunities – Involved Recreation User



Involved Recreation Users were asked to identify which Parks and Recreation websites they use to search for recreation opportunities. The most commonly identified websites were: Arizona Game & Fish, Arizona State Parks, Bureau of Land Management, National Parks Service. Other users accessed various County, City and Local Park websites, local park websites, Arizona Office of Tourism website, State Land Department website. A list of websites used and the number of Involved Recreation Users who said that they use each website will be included in Appendices in the final version of the plan.

Involved Users were also asked to identify other sources of information they use to find out about outdoor recreation opportunities that were not included in the categories above.

Many respondents used Arizona Game & Fish materials (hunting regularions, emails, website), Arizona Highways, emails or information sent out to a listserve by various clubs or outdoor recreation organizations (e.g., Good Sam for camping, birding, hiking, geocaching, OHV, hunting, etc.). Others hear about opportunities through group memberships (e.g., Girl Scouts, etc.) Others stated that they gather information through their own, or their families or friends explorations around the state.

RECREATION BENEFITS

The perceived benefits of recreation can be linked directly to the “quality of life” of individuals within a larger community (See Chapter 3 on Benefits). What constitutes quality of life is subjective and there is much debate about how to determine or quantify it. One approach is to describe the characteristics of the good life (helping others, getting along with family and friends) as dictated by religious or other philosophical systems. A second approach is based on the satisfaction of preferences, whether people can obtain the things they desire commensurate with their resources (buying the ideal house, vacations, hobbies). A third approach defines quality of life in terms of the experience of individuals, using such factors as joy, pleasure, contentment and life satisfaction (Diener and Suh, 1997).

The following sixteen statements regarding the potential benefits of parks and recreation areas were used as indicators of quality of life for residents in Arizona and reflect a bit of all three approaches. Respondents were asked how strongly they agreed or disagreed with the statements regarding the benefits of outdoor recreation.

Table 55. Benefits of Parks, Recreation and Open Space – Involved Recreation Users

Benefits of Parks, Recreation and Open Space	Strongly disagree 1	Disagree 2	Neither disagree nor agree 3	Agree 4	Strongly agree 5	Mean
Provide opportunities for family interaction (n=1948)	1.4%	1.8%	10.1%	29.0%	57.8%	4.40
Promote a healthy lifestyle through physical activity (n=1944)	1.5%	2.3%	9.0%	30.2%	57.0%	4.39
Provide constructive activities for youth (n=1946)	1.9%	2.6%	12.2%	30.9%	52.4%	4.29
Protect natural and cultural resources (n=1941)	2.3%	2.8%	14.0%	25.1%	55.8%	4.29
Make cities and regions better places to live (n=1948)	2.2%	4.2%	14.2%	27.6%	51.8%	4.23
Promote mental health (n=1947)	2.5%	4.9%	15.3%	27.8%	49.6%	4.17
Educate people about the environment (n=1949)	2.9%	5.7%	17.0%	29.4%	44.9%	4.08
Attracts tourists to the region (n=1940)	2.8%	4.9%	19.6%	29.4%	43.4%	4.06
Other (n=162)	8.6%	4.3%	18.5%	13.0%	55.6%	4.02
Increase community pride (n=1942)	2.4%	6.1%	23.1%	31.4%	37.1%	3.95
Educate the public about the culture and history of Arizona and American Indian tribes of the region	3.1%	7.2%	21.4%	30.3%	38.1%	3.93
Help local and regional economic development (n=1944)	3.1%	6.4%	26.8%	31.3%	32.4%	3.83
Prevent urban sprawl (n=1939)	4.8%	11.0%	23.9%	23.8%	36.5%	3.76
Increase property values (n=1942)	4.5%	9.3%	32.2%	26.2%	27.8%	3.64
Attracts new businesses and retains jobs (n=1940)	4.2%	12.9%	32.4%	26.8%	23.8%	3.53
Increase the understanding and the tolerance of others (n=1939)	7.6%	17.2%	33.0%	22.4%	19.8%	3.29

Involved Recreation Users rated the top two benefits approximately equally, *provide opportunities for family interaction* (86.8% agreed; 4.40), and *promote a healthy lifestyle through physical activity* (87.2% agreed; 4.39), followed by two benefits receiving the same mean rating - *provide constructive activities for youth* (83.3% agreed; 4.29) and *protects natural and cultural resources* (80.9% agreement; 4.29). It has been well-documented that parks and recreation programs targeted specifically to youth *provide constructive activities* that can help to reduce juvenile crime when combined with other community efforts (see Benefits Chapter). In the number four spot, 79.4% of respondents agreed that parks and recreation facilities *make cities and regions better places to live* (4.23). Thus, these respondents tended to appreciate the social benefits associated with outdoor recreation (e.g., the opportunities provided for families, and youth) as well as personal health benefits and environmental benefits.

All of the items except for the lowest rated benefit - *increasing the understanding and the tolerance of others* (3.29), received a mean rating that rounded to 4 on a scale of 5 (mean ratings of 3.51 to 4.49) indicating that Involved Users are well aware of the variety of benefits that recreation facilities and open space provide. This information could be used by agencies who are looking for advocates for their systems.

PARTICIPATION IN OUTDOOR RECREATION ACTIVITIES

Types of Outdoor Recreation Activities

The surveys sought to gain knowledge regarding participation rates in specific types of recreation activities. Activities were grouped into four broad categories, each broken down into individual activities. See Table 48 for listing of these categories.

Table 56: Outdoor Recreation Activities included on Involved Recreation User and Provider Surveys by Category

Visiting and Learning Based Activities		
	Attending an outdoor or special event (such as sports event, concert or festival)	
	Bird watching or photography	
	Nature study or environmental education activities	
	Picnicking	
	Recreational motorized driving on maintained roads (such as sightseeing or driving for pleasure)	
	Taking guided tours of cultural or recreational sites	
	Visiting a cultural or historic area (such as an archaeological site or museum)	
	Visiting a local park (such as a playground or municipal park)	
	Visiting a natural or wilderness area (such as a regional, state or national park, botanical garden)	
	Wildlife watching or photography	
Active Land-Based Activities		
	Off-Highway vehicle use (such as dirt bike riding or all-terrain-vehicles (ATVs))	
	4-wheel driving	Playing football
	Backpacking	Playing soccer
	Bicycling or mountain biking	RV camping
	Day hiking	Rock or mountain climbing
	Horseback riding	Skateboarding
	Hunting	Target shooting
	Playing softball or baseball	Tent camping
	Playing golf	Walking, jogging or running on trails or at a park
Water-Based Activities		
	Fishing	Swimming in a lake or stream

Jet skiing or operating personal watercraft	Swimming in a public pool
Kayaking or canoeing	Waterskiing
Motorized boating	
Snow-Based Activities	
Cross-country skiing or snowshoeing	
Downhill skiing or snowboarding	
Sledding or snowplay	

Involved Recreation User Survey

Survey items asked respondents to rate how often they currently participate in four broad categories of outdoor recreation, each broken down into individual activities.

The question for recreation participation was asked in terms of number of times respondents had engaged in each activity during the last 12 months (1=not at all, 2=once a year, 3=a few times a year, 4=once a month, 5=once a week, 6=twice a week or more). In addition, they were asked if they will participate more, less, or the same in these activities over the next five years. The future increase column shows the percentage of respondents indicating that they will participate in the activity more in the next five years in Arizona.

Participation rates for the activity categories listed below are for the respondents of Involved Users. This user category was described in the Methods Section in Chapter 2 but it should be noted again that this is a survey of recreation users who received the questionnaire via email through recreation agencies and associations, listservs and email distribution and is not representative of the general public.

Visiting and Learning Activities

Visiting and Learning activities had the overall highest participation among the four broad recreation categories, over 80% participated in 7 of the 10 individual activities. The highest categories for Visiting and Learning Activities include *Visiting a natural or wilderness area* at 95% of respondents participating in the past year, followed by *Recreational motorized driving on maintained roads* (87%) and *Wildlife watching or nature photography* (87%). See Table 49 for listing of all activities. The activities rated as having the lowest current use are *Taking guided tours of cultural or recreational sites* (54%) and *Nature study or environmental education activities* (61%); this may be due to the fact that respondents are already ‘Involved Users’ and these activities usually engage new outdoor recreationists and those less familiar with outdoor activities. The categories that respondents say they are most likely to increase in participation are *Visiting a natural or wilderness area* (39%), *Wildlife watching or nature photography* (33%) and *Recreational motorized driving on maintained roads* (29%).

Table 57: Participation by Involved Recreation Users in Visiting / Learning Activities

Current Participation Rate	Not at all	Once	A few times	Once a month	Once a week	Twice a week or more	Percent who say this will increase
		Low Use	Moderate Use		High Use		
Visiting a natural or wilderness area	4%	6%	39%	32%	10%	8%	39%
Wildlife watching or nature photography	12%	5%	36%	20%	11%	15%	33%
Recreational driving on maintained roads	12%	4%	34%	30%	11%	8%	29%
Visiting a cultural or historical area	14%	19%	53%	11%	1%	1%	28%
Picnicking	16%	8%	50%	19%	4%	2%	26%
Nature study or environmental education activities	37%	14%	30%	10%	4%	4%	23%
Attending an outdoor or special event	18%	14%	49%	14%	3%	1%	21%
Bird-watching or photography	32%	7%	30%	11%	7%	13%	21%
Taking guided tours of cultural or recreational sites	45%	18%	31%	4%	0%	0%	21%
Visiting a local park	18%	8%	35%	16%	12%	10%	17%

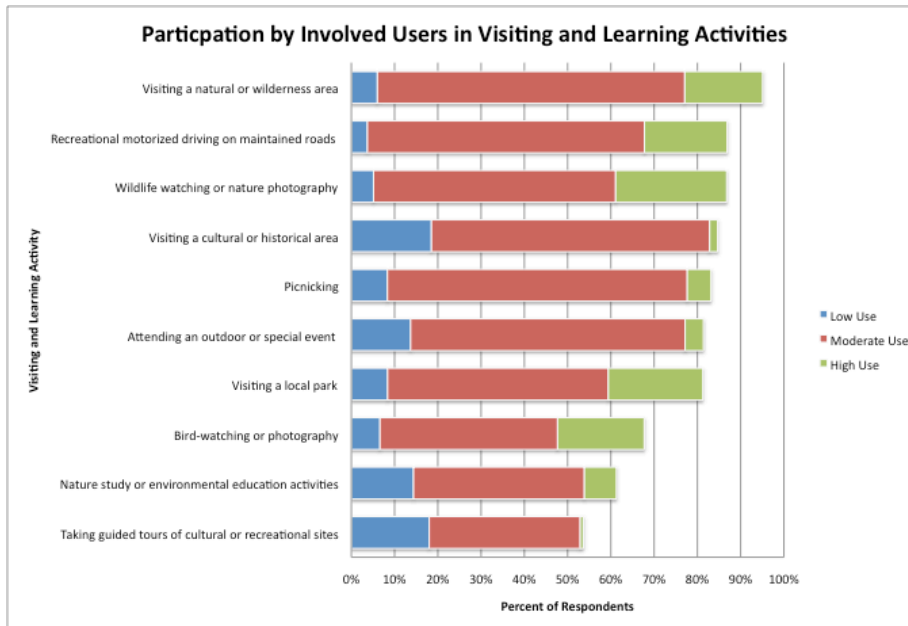
Frequency of Participation

Another key factor to consider when planning for facilities or staffing and management needs, is the frequency or level of use of participation. While 20% to 30% of a population may participate in a particular activity sometime during a given year, maybe 8% does this activity at least one or two times a week (52-130 or more times a year). This frequency rate may result in a greater number of people on the ground versus another activity more people may participate in but may do so only occasionally.

It is important to note that some restrictions may prevent recreationists from participating in an activity as often as they would like. For example, participation in winter sports in Arizona only occurs at the higher elevations and only if there is sufficient snow on the ground, usually not in the desert and not all year long. Many people like to tent camp and do so all year long, camping in the mountains in the summer and moving to the desert in the winter. To participate in big game hunting, a hunter's application must be drawn to receive one of the limited permits for their desired game species and they can only hunt in certain locations during a specified hunting season. Other activities can be done all year and statewide, but require a specific resource, such as a ball field, fishing lake, hiking trail, OHV route or rock wall/cliff suitable for climbing.

Figure 23 reflects the percentage of Involved Recreation Users, divided into high, moderate and low use, participating in visiting and learning outdoor recreation activities during the past twelve months. High use equates to those who said they participate in an activity once or twice a week (at least 52-130 times a year), moderate use equates to a few times a year to once a month (approximately 5-12 times a year), and low use equates to once a year.

Figure 36. Visiting / Learning Activity Participation Percentages by Level of Use — Involved Recreation Users



Active Land-Based Activities

The categories that Involved Users participated in most frequently for Active Land-Based activities include *Day hiking* (87%), *Walking, jogging or running on trails or at a park* (82%), *Tent camping* (72%), and both *4-wheel driving* and *Target shooting* at (67%). See Table 50 for listing of all activities. The categories that respondents say they are most likely to increase in participation are *Hunting* and *Tent camping* (34%), followed by both *Day hiking* and *Walking, jogging or running on trails or at a park both with* (33%), along with *Target shooting* and *RV camping* (32%).

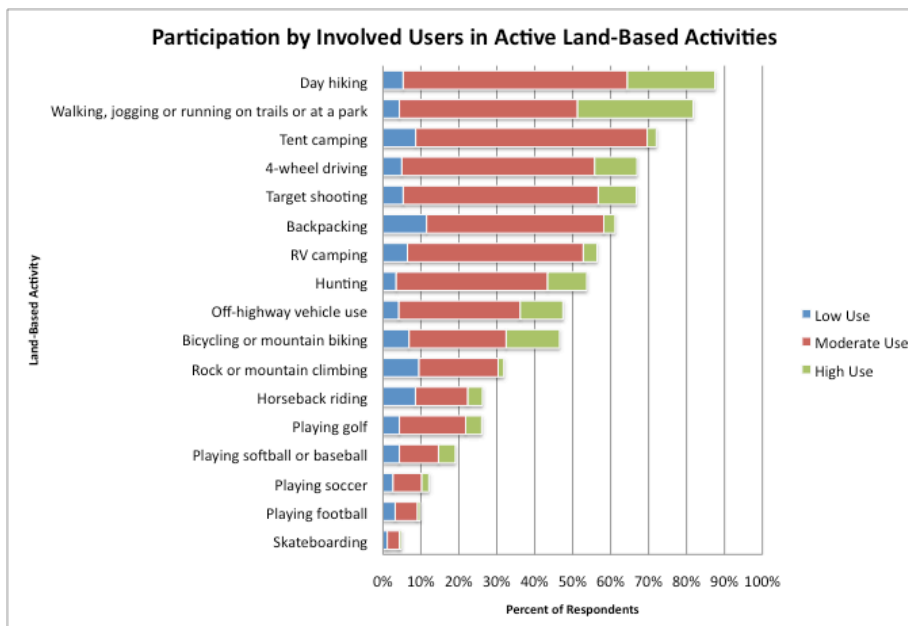
Table 58: Participation by Involved Recreation Users in Active Land-Based Activities

Current Participation Rate	Not at all	Once	A few times	Once a month	Once a week	Twice a week or more	Percent who say this will increase
		Low Use	Moderate Use		High Use		
Hunting	45%	3%	24%	16%	5%	5%	34%
Tent camping	28%	9%	44%	17%	1%	1%	34%
Day hiking	12%	5%	38%	21%	13%	10%	33%
Walking, jogging or running on trails or at a park	18%	4%	34%	13%	12%	18%	33%
RV camping	43%	6%	30%	17%	1%	2%	32%
Target shooting	33%	5%	31%	20%	6%	4%	32%
Backpacking	38%	11%	35%	12%	2%	1%	29%
4-wheel driving	33%	5%	29%	22%	6%	5%	26%
Bicycling or mountain biking	53%	7%	20%	6%	6%	8%	24%
Off-highway vehicle use	52%	4%	19%	13%	6%	5%	24%
Horseback riding	73%	9%	11%	3%	1%	2%	17%
Rock or mountain climbing	68%	9%	18%	3%	1%	1%	12%
Playing golf	74%	4%	12%	5%	3%	1%	10%

Current Participation Rate	Not at all	Once	A few times	Once a month	Once a week	Twice a week or more	Percent who say this will increase
		Low Use	Moderate Use		High Use		
Playing softball or baseball	80%	4%	10%	1%	3%	2%	6%
Playing soccer	88%	3%	6%	1%	1%	1%	4%
Playing football	90%	3%	5%	1%	0%	0%	2%
Skateboarding	95%	1%	3%	1%	0%	0%	2%

Figure 24 reflects the percentage of Involved Recreation Users, divided into high, moderate and low use, participating in land-based outdoor recreation activities during the past twelve months. High use equates to those who said they participate in an activity once or twice a week (at least 52-130 times a year), moderate use equates to a few times a year to once a month (approximately 5-12 times a year), and low use equates to once a year.

Figure 37: Land-Based Activity Participation Percentages by Level of Use — Involved Recreation Users



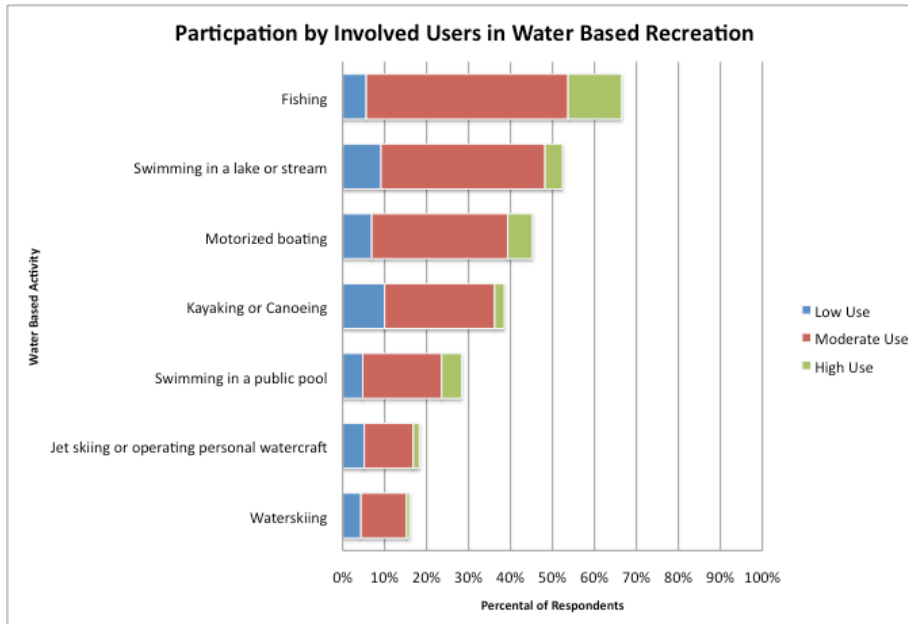
Water-Based Activities

The highest categories for Water-Based activities include *Fishing* (66%) and *Swimming in a lake or stream* (52%). All other activities fall below 50% of respondents participating in at least once a year. See Table 52 for listing of all activities. The categories that respondents say they are most likely to increase in is *Fishing* (48%), followed *Kayaking or canoeing* (31%).

Table 59: Participation by Involved Users in Water-Based Activities

Current Participation Rate	Not at all	Once	A few times	Once a month	Once a week	Twice a week or more	Percent who say this will increase
		Low Use	Moderate Use		High Use		
Fishing	33%	6%	30%	18%	7%	6%	48%
Kayaking or Canoeing	61%	10%	20%	6%	1%	1%	31%
Swimming in a lake or stream	47%	9%	32%	7%	2%	2%	26%
Motorized boating	54%	7%	24%	8%	3%	3%	24%
Swimming in a public pool	71%	5%	16%	3%	2%	3%	13%
Jet skiing or operating personal watercraft	82%	5%	10%	2%	1%	1%	12%
Waterskiing	84%	4%	9%	2%	0%	0%	9%

Figure 25 reflects the percentage of Involved Recreation Users, divided into high, moderate and low use, participating in water-based outdoor recreation activities during the past twelve months. High use equates to those who said they participate in an activity once or twice a week (at least 52-130 times a year), moderate use equates to a few times a year to once a month (approximately 5-12 times a year), and low use equates to once a year.

Figure 38. Water-Based Activity Participation Percentages by Level of Use— Involved Recreation Users

Snow-Based Activities

Snow-Based activities are the lowest activity that Involved Users participated in, this is not surprising given the climate in many parts of Arizona. Although the highest categories *Sledding or snow play* (24%) had a fairly high participation of 45% of respondents participating at least once last year. See Table 53 for listing of all activities.

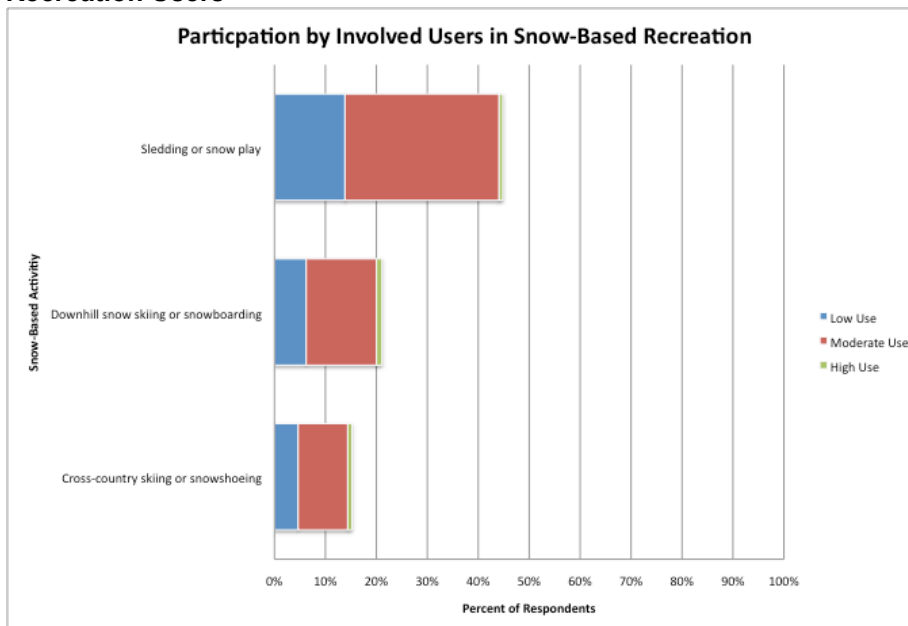
The categories that respondents say they are most likely to increase in is *Sledding or snow play* (24%).

Table 60: Participation by Involved Recreation Users in Snow-Based Activities

Current Participation Rate	Not at all	Once	A few times	Once a month	Once a week	Twice a week or more	Percent who say this will increase
		Low Use	Moderate Use		High Use		
Sledding or snow play	55%	14%	29%	1%	1%	0%	24%
Downhill snow skiing or snowboarding	79%	6%	13%	1%	1%	0%	17%
Cross-country skiing or snowshoeing	85%	5%	9%	1%	0%	1%	16%

Figure 26 reflects the percentage of Involved Recreation Users, divided into high, moderate and low use, participating in snow-based outdoor recreation activities during the past twelve months. High use equates to those who said they participate in an activity once or twice a week (at least 52-130 times a year), moderate use equates to a few times a year to once a month (approximately 5-12 times a year), and low use equates to once a year.

Figure 39: Snow-Based Activity Participation Percentages by Level of Use — Involved Recreation Users



Several of the activities show at least some level of participation by 75% or greater of the majority of Involved Users, such as hiking, picnicking, visiting a historical or cultural area, a local park or a natural or wilderness area, and recreational driving on maintained roads. Some of the activities show at least some level of participation by half (50%) of Involved Recreation Users, such as bird watching, taking guided tours of cultural or recreational sites, hunting, RV and tent camping. However, other activities in this list are participated in by less than half of all Involved Recreation Users, and some by less than 20%.

Providers Survey

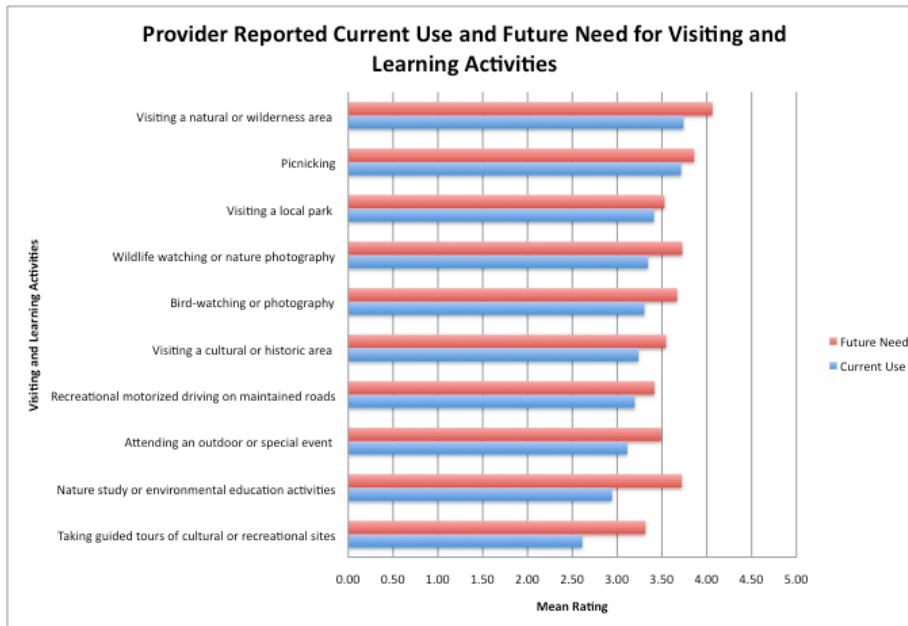
The Providers survey questions regarding outdoor recreation activity participation were asked a bit differently than the Involved User survey. This section of the online survey for recreation providers focused on current participation levels and future needs of outdoor recreation users in the same four broad recreation activity categories broken down into individual activities. The questions in this section asked respondents to assess the level of current use and level of future need for various activities in the providers' management area on a five point scale where one (1) is no current use or future need and five (5) is high current use or future need. Because of this difference in the questions, there is no direct comparison between these responses and those of the Involved Users, however it is insightful to see if providers and users responses seem to report similar usage.

Visiting and Learning Activities

Table 54 and Figure 27 show the difference in mean values (out of 5) between current and future recreation trends for Visiting and Learning activities. Regarding current use, the highest rated activity is *Visiting a natural or wilderness area* (3.74) which also had the highest future need (4.06). Other activities rated with a high current use are *Picnicking* (3.71) and *Visiting a local park* (3.41). The activities rated as having the lowest current use are *Taking guided tours of cultural or recreational sites* (2.61) and *Nature study or environmental education activities* (2.94). Interestingly, these are also the lowest rated activities indicated by the Involved Users.

Table 61: Participation Reported by Recreation Providers for Visiting / Learning Activities

Outdoor Recreation Activity	Current Use	Future Need
	Mean	Mean
Visiting a natural or wilderness area	3.74	4.06
Picnicking	3.71	3.86
Visiting a local park	3.41	3.53
Wildlife watching or nature photography	3.34	3.73
Bird-watching or photography	3.3	3.67
Visiting a cultural or historic area	3.24	3.55
Recreational motorized driving on maintained roads	3.2	3.42
Attending an outdoor or special event	3.11	3.49
Nature study or environmental education activities	2.94	3.72
Taking guided tours of cultural or recreational sites	2.61	3.32

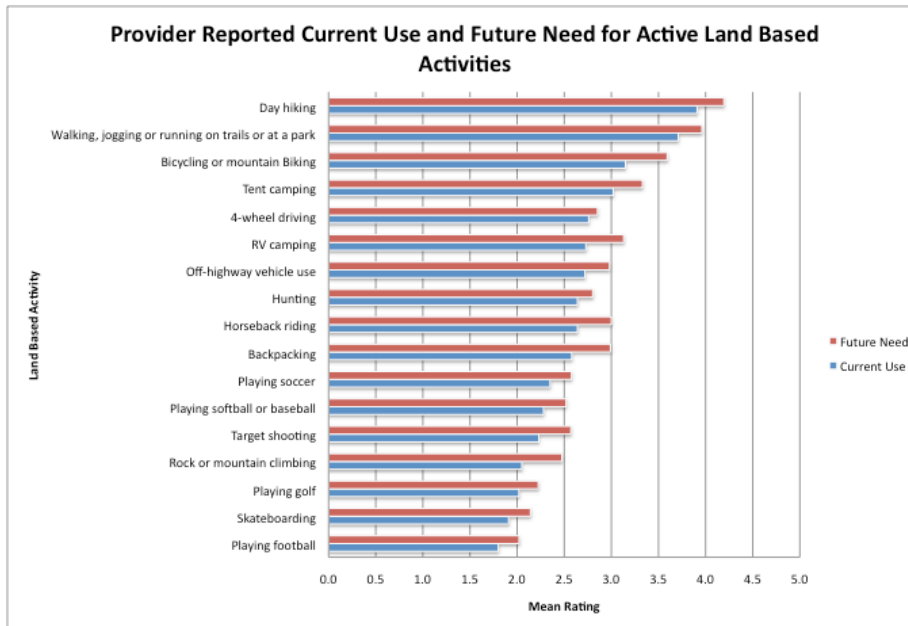
Figure 40: Current Use and Future Need Mean Ratings for Visiting / Learning Activities - Providers

Active Land-Based Activities

Table 55 and Figure 28 show the difference in mean values (out of 5) between current and future recreation trends for Active Land-Based Activities. Regarding current use, the highest rated activity is *Day hiking* (3.91) which also had the highest future need (4.19). Other activities rated with a high current use are *Walking, jogging or running on trails or at a park* (3.71) and *Bicycling or mountain biking* (3.15). The activities rated as having the lowest current use are *Playing football* (1.80) and *Skateboarding* (1.91); this may be due to the fact that many of the provider respondents manage large public land for more wilderness related values and not provide community based sports recreation.

Table 62: Current Use and Future Need Mean Ratings for Active Land-Based Activities - Providers

Outdoor Recreation Activity	Current Use	Future Need
	Mean	Mean
Day hiking	3.91	4.19
Walking, jogging or running on trails or at a park	3.71	3.96
Bicycling or mountain Biking	3.15	3.59
Tent camping	3.02	3.33
4-wheel driving	2.76	2.85
RV camping	2.73	3.13
Off-highway vehicle use	2.72	2.98
Horseback riding	2.64	3.00
Hunting	2.64	2.80
Backpacking	2.58	2.99
Playing soccer	2.35	2.58
Playing softball or baseball	2.28	2.52
Target shooting	2.23	2.57
Rock or mountain climbing	2.05	2.47
Playing golf	2.02	2.22
Skateboarding	1.91	2.14
Playing football	1.80	2.02

Figure 41. Current Use and Future Need Mean Ratings for Land-Based Activities - Providers

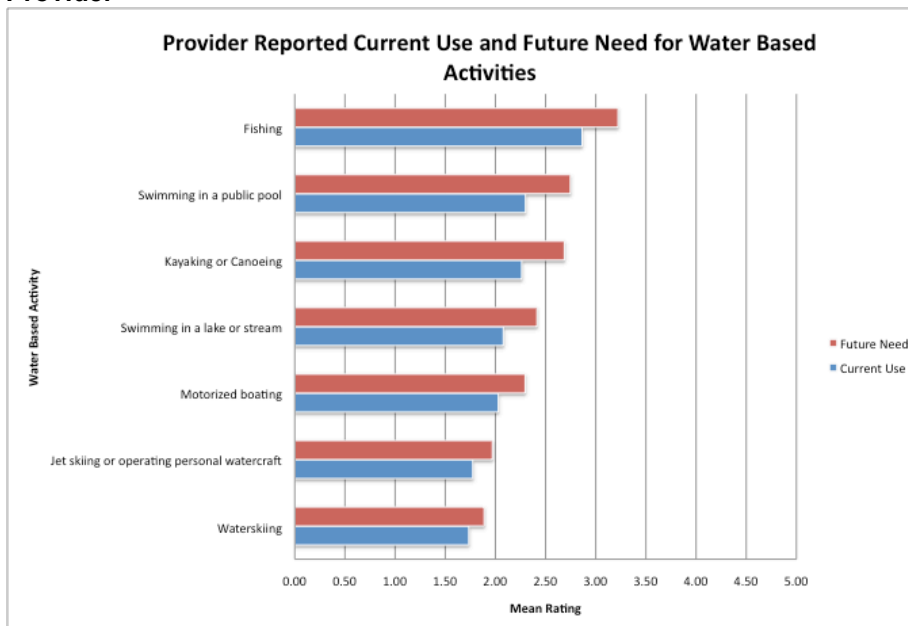
Water-Based Activities

Table 56 and Figure 29 show the difference in mean values (out of 5) between current and future recreation trends for Water-Based activities. Regarding current use, the highest rated activity is *Fishing* (2.86) which also had the highest future need (3.22). Other activities rated with a high current use are *Swimming in a public pool* (2.30) and *Kayaking or Canoeing* (2.26).

Table 63: Current Use and Future Need Mean Ratings for Water -Based Activities - Providers

Outdoor Recreation Activity	Current Use	Future Need
	Mean	Mean
Fishing	2.86	3.22
Swimming in a public pool	2.30	2.75
Kayaking or Canoeing	2.26	2.69
Swimming in a lake or stream	2.08	2.41
Motorized boating	2.03	2.30
Jet skiing or operating personal watercraft	1.77	1.97
Waterskiing	1.74	1.89

Figure 42: Current Use and Future Need Mean Ratings for Water-Based Activities - Provider



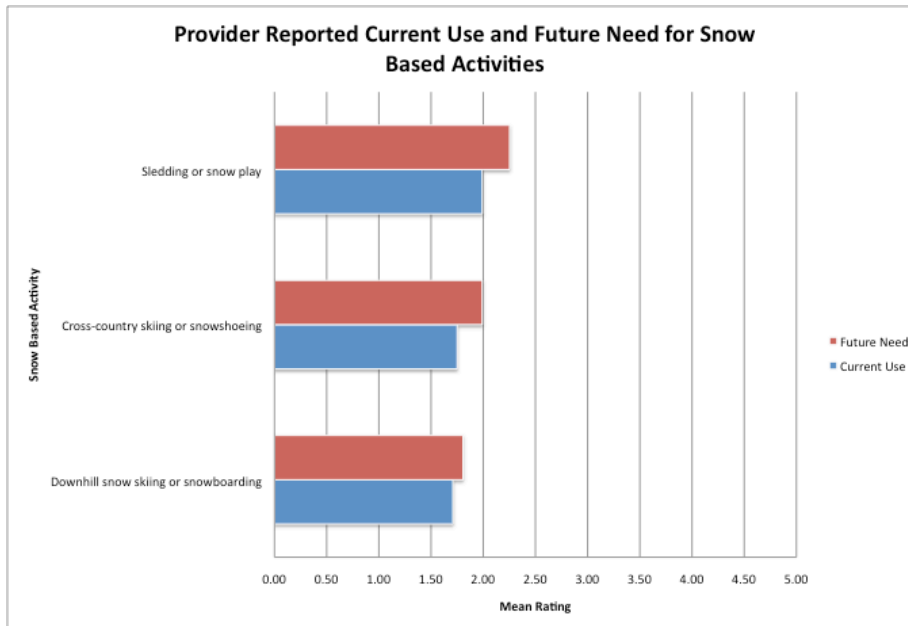
Snow-Based Activities

Table 57 and Figure 30 show the difference in mean values (out of 5) between current and future recreation trends for Water-Based activities. Of the three listed activities, *Sledding and snow play* rated the highest for current use (1.99) and future need (2.25).

Table 64: Current Use and Future Need Mean Ratings for Snow -Based Activities - Providers

Outdoor Recreation Activity	Current Use	Future Need
	Mean	Mean
Sledding or snow play	1.99	2.25
Cross-country skiing or snowshoeing	1.75	1.99
Downhill snow skiing or snowboarding	1.71	1.81

Figure 43: Current Use and Future Need Mean Ratings for Snow-Based Activities - Providers



Chapter 6

ARIZONA'S PRIORITY OUTDOOR RECREATION ISSUES

Each State's plan must identify outdoor recreation issues of statewide importance based upon, but not limited to, input from the public participation program. The plan must also identify those issues that the State will address through the LWCF, and those issues which may be addressed by other means.

In a brainstorming session, the SCORP Work Group identified two tiers of issues currently affecting Arizona's outdoor recreation situation. Many of these issues were included in questions asked during the Involved Recreation User and Provider surveys to determine the opinions and perceptions of these groups in regard to these issues.

After further research and evaluation, these issues were consolidated and are summarized in the nine priority areas listed below. They are listed in no particular order.

Table 65. Seven Priority Outdoor Recreation Issues For 2013 SCORP

TIER 1 – TOP PRIORITY ISSUES

- **Secure Sustainable Funding**
- **Improve Collaborative Planning and Partnerships**
- **Respond to the Needs of Special Populations and Changing Demographics**

TIER 2 – 2ND PRIORITY ISSUES

- **Resolve Conflicts**
- **Secure Access to Public**
- **Protect Arizona's Natural and Cultural Resources**
- **Communicate with and Educate the Public**

The following sections describe each issue and list out the goals and action strategies suggested to address each issue. In addition, many of the issues have been incorporated into the Open Project Selection Process (rating criteria) for LWCF grants.

SECURE SUSTAINABLE FUNDING

Issue: The recent economic downturn exacerbated the already existing need to secure adequate levels of outdoor recreation funding. These funding levels now, more than ever are inadequate to meet the recreation needs of Arizona's residents and visitors. Monies are tight or nonexistent for all aspects, including land acquisition, construction and renovation of facilities, operations and maintenance, planning and monitoring, and staffing programs. Clearly, budget stresses are presenting challenges to local, state and federal governments as they attempt to continue providing recreation for a growing and changing population. Insufficient resources to fund an agency's recreation budget and stability of the agency's budget are key issues for all recreation providers. Increasing population, heavy use and inadequate maintenance are taking their toll on our outdoor recreation systems statewide. Creative strategies that include a diverse array of sustainable funding sources, grants and public/private partnerships need to be developed.

Goal: The goal is to enhance the quality of Arizona's outdoor recreation opportunities by protecting current facilities and programs, protecting habitat and ecosystems, and acquiring new land and water resources and programs. These lands and facilities are managed to support urban and natural resource based outdoor recreation, safeguard the environment and protect and interpret Arizona's outdoor recreation heritage while providing universal access for current and future generations.

Action Strategies:

1. Work with partners and advocates, such as Involved Recreation Users and outdoor recreation user groups to continue to propose and support alternative funding mechanisms to decision-makers, supported by statistics on population, surveys, economic impacts, etc.
2. Develop a funding program to create sufficient funding and stable resources to manage and maintain outdoor recreation facilities, as the operation and maintenance of existing facilities are oftentimes not eligible for grant funding. Make recommendations to the State Legislature for long-term funding programs.
3. Introduce a legislative bill (recreational tax or gas tax) to increase budgets for all agencies involved in outdoor recreation, from the local to state levels. Work with agencies to allocate the distribution of funds.
4. Encourage Congress to increase outdoor recreation funding for federal agencies in Arizona and granting programs that provide outdoor recreational opportunities.
5. Explore new and innovative funding methods for outdoor park and recreation facilities. These methods may include ideas such as public/private partnerships, cost sharing among multiple government agencies or an exercise tax on outdoor recreational equipment, increased reliance on volunteers or identification of new opportunities for revenue generation.
6. Increase revenue generating capabilities for outdoor recreation by continuing to update and improve technologies such as automated fee collection systems and reservation systems, increasing amenities, programming fees and non-traditional

uses of sites or facilities.

7. Re-envision management of outdoor recreation from traditional operations to include alternative possibilities (e.g., collaborative management, non-profit management, etc.)

Continue to:

- Maintain and renovate outdoor recreation facilities for future generations.
- Provide for expansion of trail systems and regional networks: hiking, biking, horse, and water; OHV, dirt bike and ATV.
- Enhance and upgrade signage and maps for all outdoor recreation lands and waters.
- Acquire lands for outdoor recreation at all levels of government.
- Support publicly funded programs that provide financial assistance for the actions listed above.

IMPROVE COLLABORATIVE PLANNING AND PARTNERSHIPS

Issue: Many issues related to recreation can be addressed by working collaboratively with other agencies and individuals and seeking public/private partnerships.

Of significant importance since the 2008 SCORP is the role of nonprofits in collaborating with land agencies to accomplish goals. The budget cuts to agencies have limited their ability to accomplish all planned or desired projects, in many instances local nonprofits and friends groups have filled in these efforts and in some instances taken over management of areas. As the role of nonprofits increases, attention needs to be given to the different collaborative management options available and may also require additional training to nonprofits taking on a new role.

A continuing role of collaboration is needed to address consistency between land agencies. The lands that people recreate on in Arizona are owned and/or managed by a multitude of agencies, organizations and private landowners, usually in the context of a checkerboard pattern. In many instances, the lands are not fenced or signed as jurisdictions change; however, the governing laws, regulations and policies may differ substantially from one parcel of land to the next. The public is often unaware of nor concerned with which entity manages the land; they simply wish to enjoy their chosen recreational pursuits with minimal problems or disruptions (i.e., seamless management). They want consistent opportunities and regulations from one jurisdiction to the next. This requires interagency collaboration on uniform signage, policies and consistent enforcement of laws across jurisdictions. Cooperative efforts are also beneficial when recreational activities within one jurisdiction impact the resources of adjacent lands, especially the urban/wildland interface.

Goal: The goal is to expand systematic coordination, cooperation and information gathering among outdoor recreation planners and providers such as federal, tribal, state, regional and local government agencies, schools, non-profit and for profit cooperators, and willing private landowners. In conjunction, there should be an increase in communication and collaboration with the public concerning resource and outdoor recreation goals, needs and management.

Action Strategies:

1. Regional forums should be convened to develop collaborative strategies among communities with common interests, tourism business operators, nonprofit organizations, and the public lands managers responsible for delivering the outdoor experiences visitors desire. The regional forums should focus on cooperative approaches for:
 - Understanding of regional priorities for outdoor recreation needs, wildlife habitat stewardship planning, facilities development and operations / management strategies,
 - Public information and marketing responsive to visitor preferences,
 - Education, volunteer and youth outreach programs,
 - Cultural sites stewardship and heritage tourism,
 - Connectivity among recreation sites, heritage and cultural sites, communities, and privately and publicly owned open lands, and/or
 - Specific management actions to deliver quality outdoor experiences and to conserve wildlife, its habitats and migration corridors.
2. Public recreation agencies faced with tight budgets yet increasing demand for recreation services should expand volunteer programs to cover a broader range of recreation and resource management activities and consider appropriate fees for facilities and programs to enhance public services and interpretive/education programs.
3. Leverage recreation agency financial resources through a creative mix of partnerships with private businesses, non-profits and other agencies. Create a user-friendly database of grant sources, cost sharing opportunities, volunteer programs, best collaboration practices and lessons learned and other partnership projects.
4. Government agencies, nonprofits, friends groups and local communities should engage in active collaborative management training to understand the changing roles of each in providing outdoor recreation. Training should be provided to assist nonprofits in to aid them in taking over management of new programs and responsibilities.

RESPOND TO THE NEEDS OF SPECIAL POPULATIONS AND CHANGING DEMOGRAPHICS

Issue: Our population is aging and, at the same time, our racial, ethnic and cultural diversity is growing. These demographic trends may require changes in how we

provide outdoor recreation opportunities and facilities. More facilities need to be planned with “universal access” in mind so that people of all abilities can participate in outdoor recreation opportunities. Free or low cost recreation is in demand as living costs rise and more people discover outdoor recreation activities are a good way to improve many health problems. This is especially true as outdoor recreation agencies struggle to make up funding gaps due to budget reductions. Teenagers and young adults benefit from outdoor recreation facilities and programs designed specifically to engage that age group in constructive recreational pursuits. Also, children need to continue to be encouraged to experience the natural environment as indoor pursuits (television, cell phones, video games, internet) and structured activities and safety issues increase. For children living in urban areas, the outdoors may be more theory than a real part of their daily lives. We need to create unstructured opportunities for these children to experience the natural world first-hand, near to where they live.

Goal: The goal is to provide appropriate access to enable the full range of Arizonans and visitors to enjoy outdoor recreation venues. This includes evaluation of existing facilities and venues; renovation to address deficiencies; and new facilities designed, constructed and managed to meet current universal access standards and guidelines.

Action Strategies:

1. Design recreation facilities with “universal access” in mind, wherever possible. Need for upgrades to provide more ADA-compliant outdoor recreation facilities.
2. Conduct research to identify your present and future audience/customers and plan for and design parks and recreation areas to meet their specific and varied needs. For example, teenagers’ interests have changed dramatically in the past decade, find out what would attract and engage them in a recreational facility or program in your community.
3. Plan for a variety of family types (e.g., single-parent households, grandparents raising grandchildren, multigenerational family groups) designing facilities and programs not just for the children, but also something that a variety of family configurations.
4. Partner with nontraditional events and organizations such as schools, zoos, gardens, wildlife organizations, other outdoor recreation events (e.g., triathalons), and land trusts, to attract and engage new audiences.
5. Conduct more involved barrier research and work with other outdoor recreation agencies to address barriers for demographic groups.

RESOLVE CONFLICTS

Issue: As the sheer numbers of recreationists increase and the demand for different outdoor recreation activities grows, managing the resource impacts and conflicts that develop between these uses, and also those that develop between outdoor recreation and other land uses, will become an increasingly important issue of public policy. Two areas of conflict merit continued creative management from those charged with prioritizing public resources. The first conflict arena is that which develops between different recreational users of Arizona’s finite land and water base. This conflict has

developed as a result of both an increased demand for outdoor recreation activities and the development of new recreation technologies. Motorized versus nonmotorized uses, both on land and water, have generated numerous conflict situations.

Motorized vehicle use for recreation has been increasing for the past few decades and shows no sign of slowing down, however, land managers are behind the curve in planning for this activity and treat it differently from other forms of recreation. Public land managing agencies need to address issues of OHV use, and work with the active and involved OHV community in order to address issues of misuse and education.

The second conflict area is that which develops between different outdoor recreation uses and the use of the land for other purposes (e.g., grazing, private development, etc.). This conflict has impacted the development and management of recreation lands, creating struggles between residential, agricultural, and managed public lands. For example, many private landowners have closed access across their lands because of increasing vandalism and destruction of their property. Growing populations, competition for land, and diverse outdoor recreation activities put pressure on the state's natural resources. We must understand these pressures and the limits of our natural resources. The traditional term is "carrying capacity" relating to both social and physical limits.

Goal: The goal is a well-planned balance of land uses including recreational opportunities in a regional context resulting in harmonious interactions between recreational users and with landowners, and protected natural and cultural resources.

Action Strategies:

1. Proactively plan for new and upcoming recreational activities and increased user conflicts and provide for increased recreation uses consistent with the state's growth in population.
2. Develop public and private management tools for addressing user conflicts, including facilitated discussions between stakeholders to better understand perspectives and identify areas of potential agreement.
3. Examine and understand Arizona's capacity for local and state recreation growth according to the state's natural resource base.
4. Prioritize recreational use of public lands to better meet the increasing demand for outdoor recreation.
5. Examine options such as private landowner incentive programs and recreational liability laws, which would allow public access across private lands.
6. Provide user friendly information, access directions, maps, alternative sites, restrictions and regulatory information to help reduce conflicts.
7. Embrace OHV use on public lands and manage properly for the activity, to reduce conflicts with other recreation users and minimize the activity's impacts on natural and cultural resources. Encourage standards to build sustainable OHV routes and amenities and involve user groups in planning, building and maintaining routes and facilities.

SECURE ACCESS TO PUBLIC LANDS

Issue: There is a growing need to protect, maintain, and increase access to public lands to allow for the greatest diversity of outdoor recreational users. As recreation continues to place demands on the State's lands and waters, the lack of public access to these areas has become an increasing concern among many citizens. In some cases this perception is true; more access is needed in certain areas of the state. In other cases, however, public access to recreational resources does exist, the public is simply not aware of it. Improved and easily accessible maps and signage would aid the public in locating access points. In addition, agencies are continuing to assess the use of the lands they manage. In doing so, decisions are being made about the best use of the lands resulting in the closure of some areas that were available historically for particular types of recreation, and which may not be any longer.

As more recreationists enjoy Arizona's great outdoors, private landowners who once welcomed hunters and hikers to cross their land are now locking their gates because of increasing vandalism and damage to land and property. Residential developments are pushing up against public lands, essentially blocking off existing access to these prime recreational lands.

Goal: The goal is to secure sufficient public access to recreation areas, trails and public lands in Arizona for the purpose of recreating. This may entail purchasing access easements across private land and State Trust land.

Action Strategies:

1. Identify lands and water bodies that should be maintained for public use and develop a process to prioritize acquisition of these lands and necessary access.
2. Require developers to provide for and maintain existing and future access and easements to public lands from their developments.
3. Work with transportation departments to secure safe pedestrian and equestrian access across streets, highways and canals to enhance the usability of regional trail systems.
4. Continue to provide for continued access to, and maintenance of, rural and backcountry trails and use areas for hiking, biking, skiing, equine, and motorized (OHV, snowmobile) recreation.
5. Promote public lands travel management plans that are responsive to competing recreation demands while sustaining wildlife habitats and protecting cultural resources and let the public know about opportunities for input.

PROTECT ARIZONA'S NATURAL AND CULTURAL RESOURCES

Issue: Arizona's natural and cultural resources are at risk from increasing human activities, including recreational activities, as well as natural events exacerbated by human influences such as wildfires, flooding, erosion, invasive species, and pollution. Protection of these resources needs to be put in balance with existing and future uses. Identifying important areas to protect and restore is essential to

maintaining a healthy outdoor recreation system.

Water resources, such as wetlands, lakes and streams, must be protected to maintain the needed quantity, quality, and accessibility for public recreation, wildlife and other uses.

Many organizations are promoting ecosystem-based approaches to land protection efforts. Protection and preservation of archaeological sites, prehistoric and historic places, and traditional use sites is important to Arizona's knowledge base and sense of place.

The sustainability of natural and cultural landscapes and our capability to be stewards of those resources must be considered when agencies and communities plan for and manage the location and scope of outdoor recreation activities.

Goal: The goal is to protect, restore and, where appropriate, enhance natural and cultural resource quality related to public outdoor recreation venues. This includes providing information, opportunities and programs for people to learn and care about the natural world.

Action Strategies:

1. Manage some recreational facilities for larger, minimally developed open-space, with a focus on habitat and ecosystem protection.
2. Make the most effective use of limited public and private capital investment resources by developing collaborative strategies among public agencies, business community, farm and ranch owners, and non-profit organizations.
3. Develop or renovate recreation sites using best practices resulting in cleaner surface waters through reductions in erosion and other sources of water pollution.
4. Find ways to interpret the natural and cultural features within and adjacent to recreation areas, enhancing people's awareness and understanding of their significance.
5. When siting or planning new recreation facilities, be proactive in incorporating natural wildlife habitats into recreation settings, maintaining or restoring native vegetation and water courses. Sustain the natural values through effective site designs for facilities, infrastructure and appropriate recreation uses.
6. Continue to focus on creating balance between revenue generation and natural resource protection.

COMMUNICATE WITH AND EDUCATE THE PUBLIC

Issue: One of the biggest complaints of the recreating public is lack of easily accessible information or awareness about recreation areas, access points and opportunities, especially up-to-date maps and guides. One of the biggest challenges

for land managers is to find creative ways to utilize technological advances to inform the public about Arizona's unique environments, related management issues, how to safely and responsibly enjoy our public lands, and to productively involve them in management decisions and actions.

Arizona's citizens and visitors need more effective ways to access the wide array of information about recreation sites and programs and their host communities. Outdoor recreation providers need to better integrate outdoor recreation marketing and management needs to sustain the outstanding recreation attractions, economic vitality, and resulting quality of life. The public should also be aware of the costs and benefits of providing parks, recreation areas and open space. Land managers need to create new opportunities to present environmental ethic messages such as responsible use, Leave No Trace, Tread Lightly!, etc. We need to encourage, fund, and provide environmental, cultural, and heritage interpretation and educational programs.

Another communication issue concerns productive interactions between managing agencies and the recreating public. The public needs to have viable opportunities for input prior to any final land use decisions, especially when the decision will negatively impact recreation users.

Goal: The goal is to provide effective communication efforts, especially those utilizing new technology, that satisfy the public's need for recreation information and participation in land use decisions and the agencies' need for the public to receive and understand educational messages about responsible use, resource protection, etc.

Action Strategies:

1. Establish efficient and user friendly means for citizens and visitors to access sources of information about recreation sites and activities.
2. Establish and promote online clearinghouses for outdoor recreation in Arizona (e.g., Arizona Experience ACERT map).
3. Partner with the outdoor recreation industry to enhance relations and marketing efforts.
4. Promote responsible use, Leave No Trace, Tread Lightly approaches.
5. Enhance the opportunity for public involvement in all stages of land use.
6. Utilize evolving technologies, such as social media, wireless internet access, etc to enhance communications with the public, for marketing, educational information and public feedback.

Chapter 7

OPEN PROJECT SELECTION PROCESS (OPSP)

Land and Water Conservation Fund

Process

The information presented in this section details the open project selection process used to make funding decisions for the federal Land and Water Conservation Fund (LWCF) grant programs administered by Arizona State Parks (ASP). Information includes program information, a program time schedule, guidelines used for the LWCF program and the rating points given for each. The guidelines for the LWCF programs are based on the results of the SCORP planning process and public input.

Project Solicitation

In Arizona, the LWCF grant programs are set up on an annual cycle; the schedule for the application and selection process remains the same from year to year. Eligible applicants under the LWCF grant programs include the state, all of its political subdivisions and tribal governments. In accordance with a 1994 Memorandum of Agreement between the Arizona Outdoor Recreation Coordinating Commission (AORCC) and the Arizona State Parks Board (ASPB), traditionally a portion of the LWCF allocation was made available for competitive grants and a portion was to be utilized for outdoor recreation projects at Arizona State Parks. Grant workshop announcements are made as early as August and workshop announcements are mailed to eligible applicants in September. The grant workshops, held in November, provide the applicants an opportunity to review the program and to see if there have been any modifications during the past year. The workshops are designed to ensure that applicants understand the guidelines and rating criteria used in the LWCF programs, and assist them in developing quality projects and applications.

Project Selection

After LWCF grant applications are received, each application undergoes a two step evaluation process. First, each application is screened to make sure it meets the minimum guidelines and legal requirements set forth by the National Park Service (NPS) and the ASPB. Staff then visits the site of each proposed project to become familiar with the projects. Those applications that meet all of the minimum requirements are then presented to AORCC for review. Secondly, each application is rated by a team of at least three people, using the rating criteria.

This rating criteria was developed from various components of the SCORP planning process and a working group comprised of recreation professionals from around the state. Arizona State Parks projects are not rated competitively since the 1994 Memorandum of Agreement allows a portion of the LWCF allocation to be used for outdoor recreation projects within the Arizona State Parks system. The results of the rating criteria are

presented to AORCC along with staff funding recommendations in August. Applicants receive the same information and are encouraged to attend the AORCC meeting. After all public input is heard, AORCC either adopts staff's recommendations or develops its own funding recommendations. Staff and AORCC recommendations are presented to the ASPB in September for final action. The public also has an opportunity to provide input at the ASPB meeting in September.

Arizona Outdoor Recreation Coordinating Commission

AORCC is an advisory body to the ASPB with many responsibilities, including oversight of the LWCF grant process. Made up of representatives appointed by the Governor, AORCC guides staff in developing guidelines and rating criteria to ensure objectivity. AORCC is responsible for making funding recommendations to the ASPB.

Arizona State Parks Board

Once AORCC has made its funding recommendation to the ASPB, the Board takes final action on the recommendations and directs the ASP Director or designee to sign grant award participant agreements. The ASPB, whose seven members are appointed by the Governor, oversees the administration of these grants, which is accomplished by the Grants staff.

Program Assistance

Program assistance is a priority for all grant programs at ASP. There are three ways applicants and the general public can receive this assistance. First, applicants and the general public are encouraged to call the Grants Section with questions or concerns about the LWCF programs. Second, in order to provide project development assistance to all applicants, the Grants Section holds three grant application workshops across the state each year before the beginning of each grant cycle. Third, the Grants Section offers a review of applications prior to the submission deadline to provide applicants with information and assistance to create a better application.

Public Participation

Public participation is the basis of the Arizona SCORP and the LWCF grant programs in Arizona. Public participation is integral to the LWCF grant programs for guidelines and rating criteria development process and in project solicitation and selection. This participation is achieved through numerous opportunities for public comment including AORCC and ASPB meetings during the SCORP and grant planning process.

Program Review and Updating

SCORP Working Group

Further, in an effort to obtain pertinent input from the applicants AORCC occasionally establishes a task force comprised of recreation professionals representing various geographical locales and jurisdictional affiliations. This group meets to discuss and evaluate the current rating criteria and guidelines that are being used. Ultimately the group may recommend, for AORCC and ASPB consideration, changes to the process for future use. As a result, the rating criteria and weightings change periodically to reflect the needs and demands of recreation providers and the public. Current guidelines and the

rating criteria can be found in the LWCF grant application manual, which is revised and printed each cycle.

Affirmative Action

Both the SCORP process and the LWCF programs are sensitive to the needs of all special populations. The staff at ASP are committed to meeting the needs of all Arizona's population, and seeks participation from special populations in the planning process.

LWCF Grant Program Details

The following is a brief summary of the LWCF grant programs. This information is available to the general public as well as any group or organization upon request from Arizona State Parks.

Authorization and Purpose

The **Land and Water Conservation Fund (LWCF)** Act of 1965 (Public Law 88-578) became effective January 1, 1965 and has since been authorized to continue through 2015. The Act provides financial assistance to states, their political subdivisions and Indian tribal governments for the acquisition and development of public outdoor recreation areas and facilities.

Qualification for State Participation in the LWCF grant program

To qualify for financial assistance under the LWCF program, each state must (1) designate an official to act for the state as liaison officer in dealing with the National Park Service; (2) designate an official to serve as the state's fiscal officer to receive and disburse federal funds; and (3) prepare and maintain a comprehensive statewide outdoor recreation plan. In Arizona, the State Liaison Officer is the ASP Executive Director. For LWCF program assistance a local governmental entity must have a responsibility to provide outdoor recreation opportunities to the public and (1) independent governing authority; (2) independent signature authority; (3) independent authority to commit funds.

State Authorization

Under provisions of A.R.S. § 41-511.26, state agencies and incorporated municipalities are granted authority to participate in the LWCF grant programs. The State Parks Board is responsible for administering the program in Arizona and preparing and maintaining the required outdoor recreation plan.

Eligible Applicants

Eligible applicants under these programs include incorporated municipalities, counties, state agencies, and Indian tribal governments. In accordance with a 1994 Memorandum of Agreement between AORCC and the ASPB, a portion of the LWCF allocation will be made available for competitive grants and a portion will be used for outdoor recreation projects at Arizona State Parks.

Eligible Activities

Eligible activities for the LWCF program are outdoor recreation and open space. Projects include, but are not limited to: *park development* (e.g., playground equipment, lighting,

picnic facilities, ballfields, ramadas, sports facilities, restrooms and other facilities deemed appropriate or eligible by federal and state guidelines) and *land acquisition* to serve future outdoor recreation and/or open space.

Matching Requirement

LWCF grants are awarded on a 50/50 match where the participant provides at least 50% of the project cost and the grant provides the other 50%.

Surcharge

Each successful LWCF grant recipient is required to pay a “non-project” surcharge to ASP. Revenue from surcharge payments is used to administer awarded grants and to assist in the development of the Statewide Comprehensive Outdoor Recreation Plan (SCORP). The surcharge is currently set at 10% of the grant award and is non-reimbursable.

Application Evaluation and Approval

Complete LWCF applications are evaluated by State Parks staff, reviewed by AORCC, and subsequently approved by the State Parks Board. The National Park Service approves LWCF applications.

Distribution of Funds

AORCC makes funding recommendations to the State Parks Board for final action and distribution of funding through participant agreements.

Application Deadline

Complete LWCF applications must be received by Arizona State Parks no later than 5:00 P.M. on the designated date.

State Contact

Contact Arizona State Parks, Resources and Public Programs Section, at (602) 542-7127 for further information.

Table 66: Open Project Selection Process Traditional Funding Cycle

LAST WORKING DAY IN FEBRUARY– Applications must be received by State Parks by 5:00 p.m.

MARCH/MAY – On-site inspections of proposed LWCF projects by State Parks staff.

JUNE – Project requests presented to AORCC.

JULY/AUGUST – LWCF applications rated by review team.

AUGUST – Staff funding recommendations submitted to AORCC for consideration.

SEPTEMBER – Recommendations submitted to the Arizona State Parks Board for final action.

FOLLOWING BOARD ACTION - Participant agreements executed for approved projects and notice to proceed given.

When Land and Water Conservation Funds become available, the project applications will be submitted to NPS following ASPB approval.

The Arizona State Parks Board adopted a new vision for the agency in 2009 emphasizing that part of the agency's mission to not only manage the state's *recreational, natural and cultural* resources but also to educate stakeholders, the public, the media and decision makers about the importance of the system, the benefits of preservation for individuals, families, economies, communities and the environment. The ASPB directed staff to implement this vision throughout its parks and programs, including the numerous grant programs administered by the agency.

Vision: *Arizona State Parks is indispensable to the economies, communities, and environments of Arizona.*

The rating criteria are based on the priority issues identified through the SCORP process and were developed by the SCORP Work Group and Arizona State Parks Grants staff.

Table 67: FY 2013 LWCF Rating Criteria

<u>Grant Rating Criteria Summary</u>	<u>Points</u>
1. Long-Range Planning	23
2. Project Need (Project Specific Planning/Public Involvement)	35
3. Conservation of Resources	20
a) Implementation of conservation actions, or	
b) Protection of existing resources	
4. Leveraging Funds through Donations	8
5. Project Sustainability	10
6. Past Grant Administrative Compliance	4
- Post-Completion Compliance	
- Workshop Attendance	
TOTAL POINTS	100

FY 2013 LWCF RATING CRITERIA

Long Range Planning

up to 23 points

Comprehensive long-range planning that includes recreation and/or open space elements are now a state requirement for all municipalities. If your community does not have its own long-range plan, use your county's plan. This criterion refers to your community's long-range or general plan.

The explanation and supporting documentation provided by the applicant for this criterion must demonstrate that there has been conscious planning and decision making processes designed to meet the needs of local or regional recreation users.

- Identify your long-range plan, when it was adopted and when you plan to update it. Explain and document how your community's long-range plan addresses **recreation and open space**. This explanation may include how the plan provides a framework and direction for recreation and open space in your community
- How do you plan to address the following issues in relation to **recreation and open space**?
 - Sustainable funding – What dedicated revenue sources for recreation and open space does your community have? (sales tax, general fund, revenue sharing, bonds)
 - Partnering/Collaborative Planning – Are you partnering with other agencies, corporations, individuals, non-profits or Friends Groups by sharing staff, equipment, training opportunities and other resources. Are you collaboratively planning with other entities at a regional level?
 - Meeting the needs of changing demographics and special populations - How do you plan to meet the needs of special populations and changing (e.g., the needs Explain how this project meets an identified need in relation to **recreation and open space**?

Points for this criterion will be based on your explanation **and** documentation for each issue. Responses should be brief and to the point. Documentation points will be awarded only if the supporting documents are clearly explained in the narrative.

Project Need (Project Specific Planning / Public Involvement) up to 35 points

This proposed project should be designed to meet the priority needs expressed by local or regional recreation users. This criterion refers to project specific planning.

- Explain and document what circumstances brought this project (the one this application is for) to the forefront and why this project is a priority.
- Explain and document your public outreach efforts, what you did to solicit public involvement (for example, held public hearings or meetings, conducted surveys, put notices in radio or newspapers).
- Explain and document how the public was involved in determining the need or how they responded to your public outreach efforts for the project you are applying for. Document how the public demonstrated support and affirmation for the project.
- Explain and document how this project addresses any of the following:
 - * Securing open space – How have you planned to secure open space for current and future needs? Are you planning to secure additional open space? If not, explain why. If you have open space lands, how do you plan to protect them for future generations? (working with developers, zoning, legislation, new policies/statutes)
 - * Resolving user conflicts (between recreational users, landowners and users, competing land uses).

Conservation of Resources**up to 20 points**

Arizona State Parks' vision, "*Arizona State Parks is indispensable to the economies, communities, and environments of Arizona*" emphasizes the importance of the State Parks system, and by extension, all of the natural and cultural resources utilized for outdoor recreation throughout the state. The last five years have shown that the public, the media and decision makers need to know what parks and open space contribute to the quality of life of Arizonans, both now and in the future, economically, locally and through conservation and preservation of the state's special places. This vision extends to the numerous grant programs the agency administers. Arizona State Parks is encouraging applicants to identify and work with partners to protect the special places in their communities and across the state, that help tell the story of Arizona or preserve a special place of natural beauty and significance. In addition, applicants are encouraged to conserve resources by incorporating innovative and effective technologies and green building practices into their grant projects, and/or protecting natural and cultural resources and open space.

Applicants may respond to either A or B based on the project features. Up to 20 points will be counted toward this criterion. Points will be based on the explanation and documentation on the efforts, anticipated outcomes and/or extent of the measures in conserving or protecting resources.

- A. CONSERVATION:** Explain how this project will incorporate design elements, sustainable products or habitat enhancement in the most effective manner to conserve water or energy, or enhance natural resources.

Resource Conservation examples could include use of "green" practices (products or technology), smaller footprint (less concrete or asphalt), energy efficiency or conservation use of timers or sensors, solar energy applications, water conservation or reclamation, use of gray water, harvesting rainwater, use of recyclable materials, revegetation of native plant communities, restoration of wildlife habitat, etc.

Or

- B. PROTECTION:** Explain how this project will accomplish at least one of the following:

- Explain how this project will protect existing natural resources within the project boundaries; include size of area to be protected and uses to be allowed.

Examples of existing natural resources include riparian areas, washes, wetlands, other native plant communities, or wildlife habitats.

- Explain how this project will protect existing cultural resources within the project boundaries; include extent and significance of the cultural resources and uses to be allowed.

Examples of cultural resources include archaeological sites, historic sites, or traditional use sites.

- Explain if this project acquires, protects or designates open space or provides protective buffers around existing natural areas; include type and size of area to be protected and uses to be allowed.

Note: Open space is defined as land that is generally free of uses that would jeopardize the conservation values of the land or development that would obstruct the scenic beauty of the land. Conserved land remains open space if the stewards of the parcel maintain protection of both the natural and cultural assets for the long-term benefit of the land and the public and the unique resources the area contains, such as scenic beauty, protected plants, wildlife, archaeology, passive recreation values and the absence of extensive development.

Leveraging Funds through Donations

up to 8 points

To be eligible for Land and Water Conservation Fund (LWCF) grants, all applicants must provide a minimum of 50% of the project cost. LWCF grant funds may provide a maximum of 50% of the project cost. In other words, the applicant's funds and the grant funds are said to "match" each other.

Outside donations of cash, materials, equipment or donated labor leverage existing funds which enable both the applicant's money and these grant dollars to stretch further and accomplish more.

Points will be awarded on a sliding scale if at least 10% of your agency's match comes from outside donations.

- How much (\$) of your match will come from outside donors?
- Explain and document where the donations are coming from. Describe the tangible and intangible contributions you have received for the scope of work of this project and the associated value of the contribution(s).

All donations must be verified by a letter from the donor that indicates the value of the donation.

Types of donated match:

Tangible: donations of cash, materials or equipment

Intangible: donations of labor

Unskilled labor - \$7.25/hour (current minimum rate)

Skilled labor – based on the hourly rate in your community

NOTE: In-kind work done by the applicant is not a donation; but it can be considered as part of the applicant's match.

Funds from other Arizona State Parks' administered grant programs are not allowed as donations or match.

Project Sustainability

up to 10 points

The ability of the applicant to operate, maintain or manage the facilities constructed or land acquired with grant funds throughout the required term of use is an essential factor of the LWCF grant programs. These grant programs mandate that any facilities or land, including natural areas or open space, purchased with grant funds be available for public use as set forth in this application for a prescribed period of time.

- Explain and document how your agency intends to operate, maintain or manage this project for the required term of use.

Term of use for Land and Water Conservation Funds (LWCF) is:

- In perpetuity

Past Grant Administrative Compliance

up to 4 points

This category will be completed by staff based on the applicant's past performance with the LWCF grant programs.

Post-Completion Compliance

This category is for applicants who have a closed LWCF project in which the Term of Public Use is still active.

For LWCF projects, the term of use is in perpetuity.

- a) 2 points will be awarded if the participant has complied with the post-completion self-certification process.
- b) If the applicant does not yet have any projects that require compliance with the post-completion self-certification process, 2 points will be awarded.

Workshop Attendance

All applicants are encouraged to attend the annual grant workshop. Applicants represented at an LRSP/LWCF workshop for this grant cycle will receive 2 points.

References

- Active Living Research. 2010. *The economic benefits of open space, recreation facilities and walkable community design*. <http://www.activelivingresearch.org/econbenefit>.
- Adams, L., Baskerville, K., Lee, D., Spruiell, M., & Wolf, R. 2006. *The Hispanic Community and Outdoor Recreation*. UCLA Anderson School of Management Applied Management Research Program.
- American Demographics. 2001. *The New Family Vacation*. http://findarticles.com/p/articles/mi_m4021/is_2001_August_1/ai_78426765.
- American Planning Association. 2007. *1996 State Summaries of Planning Statutes*: <http://www.planning.org/growingsmart/summaries/htm> and *Arizona specific planning history*: <http://www.planning.org/growingsmart/States/Arizona.htm>
- Anderson, R.E. (2002). *Youth and Information Technology*. In J.T. Mortimer & R. Larson (eds.). *Changing Adolescent Experience: Societal trends and the transition to adulthood*. (pp. 175-207). West Nyack, NY: Cambridge University Press.
- Arendt, Randall. 1992. *Open Space Zoning: What It Is & Why It Works*. Planning Commissioners Journal, Issue 5, July/August 1992. <http://www.plannersweb.com/articles/are015.html>
- Arizona Council of Governments (COG): www.mag.maricopa.gov/archive/AZ-COGs/index.html
- Arizona State Land Department. 2006. *Annual Report*. Phoenix, AZ. www.land.state.az.us.
- Arizona State Parks. 2008. *Arizona Statewide Comprehensive Outdoor Recreation Plan*. Arizona State Parks, Resources Management Division, Phoenix, AZ.
- Arizona State Parks. 2009. *Arizona Trails 2010: Statewide Motorized and Nonmotorized Trails Plan*. Arizona State Parks, Recreational Trails Unit, Phoenix, AZ.
- Arizona State Parks. 2007. *Growing Smarter State Trust Land Acquisition Program, FY 2007 Grant Application Instruction Manual*. Phoenix, AZ, Arizona State Parks, 69 pp (Pp 16).
- Arizona State Parks. 2012. *Visitation and Revenue Statistics*. Administrative Services, Phoenix Office, Arizona State Parks. www.azstateparks.com
- Attarian, A. (2002). *Rock climbers. self-perceptions of first aid, safety, and rescue skills*. Wilderness and Environmental Medicine, 13, 238-244.
- Bedimo-Rung, A., Mowen, A. & Cohen, D. 2005. *The significance of parks to physical activity and public health*. American Journal of Preventive Medicine (28). pp. 159-168.
- Behavior Research Center, 2010. *Arizona Watercraft Study*. For Arizona State Parks, Arizona Game and Fish Department, and Arizona Department of Transportation. Phoenix, AZ.
- Berrens, Robert P., Bohara, Alok K., Jenkins-Smith, Hank, Silva, Carol & Weimer, David L. 2003. *The advent of internet surveys for political research: A comparison of telephone and internet samples*. Political Analysis, 11(1). pp 1-22.
- Betz, Carter J., & Cordell, H. Ken. 1998. *Outdoor Recreation Supply in the United States, A Description of the Resources, Date and Other Information Sources*. October 1998. USDA Forest Service, Southern Research Station, Athens, Georgia.
- Biodiversity and Smart Growth*. www.natureserve.org/consIssues/smartGrowth.jsp
- Bureau of Land Management website: www.blm.gov
- Cameron, Margaret, & MacDougall, Colin. September 2000. *Crime Prevention Through Sport and Physical Activity*, #165. Trends and Issues in Crime and
- Cart, Julie. 2006. *Fewer Americans are Visiting National Parks. Administrators ask why*. LA Times. November 24, 2006.

- Chavez, D.J. 2000. *Changes in Demographics: Changes in Recreation Patterns*. Proceedings from the 5th Outdoor Recreation and Tourism Trends.
- Centers for Disease Control (CDC). 2012. *Facts about physical activity*. <http://www.cdc.gov/physicalactivity/data/facts.html>
- Cordell, H. K. (2012). *Outdoor recreation trends and futures: a technical document supporting the Forest Service 2010 RPA Assessment*. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station
- Cordell, Ken, Green, Gary, & Betz, Carl. 2005. *Recreation Statistics Update: Update Report No. 1, Participation Rates for Outdoor Activities in 2004*. USDA Forest Service. Nationwide Survey on Recreation and the Environment (NSRE) www.srs.fs.fed.us/trends.
- Cordell, H. Ken, Betz, Carter J., Green, Gary, & Owens, Matt. 2005. *Off-Highway Vehicle Recreation in the United States, Regions and States*. A National Report from the National Survey on Recreation and the Environment (NSRE). For USDA Forest Service National OHV Policy & Implementation Teams. Athens, GA. June, 2005. 90 pp.
- Crompton, John L. & Witt, Peter A. 1997. *Repositioning: The Key To Building Community Support*. Oct. 1997, Parks and Recreation. 32(10): 80-90. Department of Recreation, Park and Tourism Sciences. Texas A&M University.
- Crompton, John L. & Witt, Peter A. 1999. *Insights from Our Past*. (Adapted from TRENDS (1999), 35(4): 4-9)
- Crompton, John L. 2007. *Community benefits and repositioning*. Published by National Recreation and Park Association.
- Dahl, T.E. 2006. *Status and Trends of Wetlands in the Conterminous United States, 1998 to 2004*. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.
- Dahl, T.E. 2010. *Status and Trends of Wetlands in the Conterminous United States, 2004 to 2009*. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C.
- de Leeuw, Edith, D. 2005. *To mix or not to mix data collection modes in surveys*. Journal of Official Statistics, 21(2) pp. 233-255.
- Department of Agriculture, Department of Commerce, Department of Transportation Department of the Army, Department of the Interior, Environmental Protection Agency, Council on Environmental Quality. April 2006. *Conserving America's Wetlands 2006: Two Years of Progress Implementing the President's Goal*. The White House Council on Environmental Quality, 730 Jackson Place Washington, DC 20503. www.whitehouse.gov/ceq/
- Diener, Ed, and Suh, Eunkook. 1997. *Measuring Quality of Life: Economic, Social and Subjective Indicators*. Social Indicators Research 40: 189-216, 1997. Kluwer Academic Publishers. Netherlands.
- Frank, Lawrence, Kavage, Sarah and Litman, Todd. 2005. *Promoting Public Health through Smart Growth*. Smart Growth BC. Vancouver, BC Canada. www.smartgrowth.bc.ca
- Freedman, Marc (2011) *The big shift: navigating the new stage beyond midlife*, Public Affairs, New York.
- Freimund, W. A., & Borrie, W. T. (1997). *Wilderness in the 21st Century-Are there technical solutions to our technical problems?* International Journal of Wilderness, 3, 21-23.
- Galea, Sandro & Vlahov, David (2005). *Urban Health: Evidence, Challenges, Directions*. Annual Review of Public Health, 26. Pp 341-365.
- Gies, Erica. 2006. *The Health Benefits of Parks: How Parks Help Keep Americans and Their Communities Fit and Healthy*. Trust for Public Land. San Francisco, California. 24 pp.

- Gowen, Annie. 2007. *Picnics, Games and Culture Shock: Parks Work to Tailor Services While Educating Immigrants on Rules*. Washington Post. July 1, 2007; Page A01.
- Gramann, J.H. 1996. *Ethnicity, Race, and Outdoor Recreation: A Review of Trends, Policy and Research*. (Misc. Paper No. R-96-1): US Army Corps of Engineers.
- Harnik, Peter, 2003. *The Excellent City Park System*. Trust for Public Lands, Center for City Park Excellence. Washington, DC. 34 pp.
- Haworth, John T. & Veal, A.J. (eds). 2004. *Work & leisure*. New York, NY: Routledge.
- Hefferman, Rick, & Melnick, Rob. 2001. *Issues in Brief. Growth Management and Open Space Protection in Arizona: Current Tools and Progress*. Prepared for the Greater Phoenix Leadership by the Morrison Institute for Public Policy, School of Public Affairs, College of Public Programs, Arizona State University, Tempe, AZ 6pp.
www.asu.edu/copp/morrison
- Henderson, K. A., & Bialeschki, M. D. (2005). *Leisure and active lifestyles: Research reflections*. Leisure Sciences, 27(5), 355-365.
- Land and Water Conservation Fund Act of 1965 and Related Laws. As Amended through the end of the First Session of the 108th Congress (Public Law 108–198), Dec. 31, 2003.
www.nps.gov/ncrc/programs/lwcf/
- Lerneris, Steve & Poole, William. 1999. *The Economic Benefits of Parks and Open Space: How Land Conservation Helps Communities Grow Smart and Protect the Bottom Line*. Published by the Trust for Public Land. 48 pp.
- LIN, 1997. *Benefits of Parks and Recreation Update: Catalogue of Benefits in Parks and Recreation*. Rethink West, Inc. & Lifestyle Information Network, Canada's National Recreation Database. 1185 Eglinton Avenue East, Suite 502, Toronto, Ontario, M3C 3C6. <http://www.lin.ca/resource/html/outstate.htm#12>
- Louv, Richard. 2005. *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. Chapel Hill, NC: Algonquin Books. 336 pp. For additional research and strategies see the Children & Nature Network: Building a Movement to Reconnect Children and Nature, www.cnaturenet.org and www.thefuturesedge.com
- McGranahan, David A. 1999. *Natural Amenities Drive Rural Population Change*. Agricultural Economic Report No.781. US Department of Agriculture. Economic Research Service. 9/99.
- MacDonald, Stuart. 2011. *Evidence of many varieties of economic benefits linked to trails*. American Trails Magazine, Summer 2011.
<http://www.americantrails.org/resources/economics/economic-benefits-trails-macdonald.html>.
- Moore, R.L. & Driver, B.L. 2005. *Introduction to outdoor recreation: Providing and managing natural resource based opportunities*. State College, PA: Venture Publishing, Inc.
- Mortimer, Jeylan T. & Larson, Reed W. 2002. *The Changing Adolescent Experience*. Cambridge, U.K.: Cambridge University Press.
- National Park Service, Rivers, Trails and Conservation Assistance Program, *Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors*, 4th ed. www.nps.gov.
- Northern Arizona University. 2009. *The Economic Impact of Arizona State Parks*. For Arizona State Parks by Arizona Hospitality Research & Resource Center, School of Hotel & Restaurant Management, and Northern Arizona University. 88 pp.
- NRPA, 1994. *Recreation fights crime*. Parks & Recreation, March 1994. National Recreation and Parks Association. Washington, DC.
- NRPA, 2010. *Synopsis of 2010 research papers: The key benefits*. National Recreation &

- Park Association. Ashburn, VA. <http://www.nrpa.org/research-papers/>
- Nyaupane, Gyan, Ph.D., Yoshioka, Carlton, Ph.D., & Waskey, M. Troy. 2006. *Outdoor Recreation Trends and Issues in Arizona: Providers' Perspective*. For Arizona State Parks by Arizona State University, School of Community Resources and Development, Tempe, AZ.
- Nyaupane, Gyan, Ph.D., Yoshioka, Carlton, Ph.D., & Waskey, M. Troy. 2006. *Outdoor Recreation Participation, Future Demand and Issues in Arizona*. For Arizona State Parks by Arizona State University, School of Community Resources and Development, Tempe, AZ.
- Outdoor Foundation. *Outdoor Recreation Participation Report 2011*. Boulder, CO. www.outdoorfoundation.org
- Outdoor Foundation. *Outdoor Recreation Topline Participation Report 2012*. Boulder, CO. www.outdoorfoundation.org
- Outdoor Foundation. *Outdoor Recreation Participation Report 2012*. Boulder, CO. www.outdoorfoundation.org
- Outdoors Queensland. 2006. *Environmental Benefits*. Queensland Outdoor Recreation Federation, 2006. www.qorf.org.au/01_cms/details.asp?ID=171.
- Outdoors Queensland. *What is Outdoor Recreation*. Queensland Outdoor Recreation Federation, 2006. www.qorf.org.au/01_cms/details.asp?ID=686.
- Outdoor Recreation Coalition of America, *Economic Benefits of Outdoor Recreation*, State of the Industry Report (1997), <http://www.outdoorlink.com/orca/research/97SOI>.
- Pergams, Oliver W., & Zaradic, Patricia A. 2006. *Is Love of Nature in the U.S. Becoming Love of Electronic Media? 16-year downtrend in national park visits explained by watching movies, playing video games, internet use, and oil prices*. Journal of Environmental Management, 80(2006) Pp. 387-393.
- Pew Internet & American Life Project, August, 2012. *Demographics of internet users*. <http://www.pewinternet.org/Static-Pages/Trend-Data-%28Adults%29/Whos-Online.aspx>.
- RoperASW, 2004. *Outdoor Recreation In America 2003: Recreation's Benefits to Society Challenged by Trends*. For The Recreation Roundtable, Washington, DC. 22 pp. http://www.funoutdoors.com/files/ROPER%20REPORT%202004_0.pdf.
- Salamon, L. M., (1999), *Global Civil Society. Dimensions of the Nonprofit Sector*, The Johns Hopkins University Center for Civil Society Studies, Baltimore.
- Schachter, J. Gingold, J. Shepard, J. & Vint, M. 1998. *The Economic Benefits of Integrating Natural Open Space into Land Development*. Tucson, AZ: Rincon Institute. 27 pp.
- Schaefer, David R. & Dillman, Don A. 1998. *Development of a standard e-mail methodology: Results of an experiment*. Public Opinion Quarterly, 62. Pp. 378-397.
- Sherer, Paul M. 2003. *The Benefits of Parks: Why America Needs More City Parks and Open Space*. Trust for Public Land, San Francisco, CA. 33 pp.
- Silberman, Jonathan. 2002. *The economic importance of fishing and hunting*. Arizona State University West. http://www.azgfd.gov/w_c/survey_results.shtml
- Southwick Associates, Inc. 2002. *The 2001 economic benefits of watchable wildlife recreation in Arizona*. <http://www.southwickassociates.com/portfolio-view/arizona-2001-economic-benefits-of-watchable-wildlife-recreation-in-arizona/>
- St. George, Donna. 2007. *Getting Lost in the Great Indoors. Many Adults Worry Nature Is Disappearing From Children's Lives*. Washington Post article, June 19, 2007; A01.
- The Non Profit Times, *Special Report: Platform for the Nonprofit Sector*, www.thenonprifittimes.com retrieved August 29, 2012

- Tummons, Mark & Marshall, Anne. 2009. *Tennessee 2020: Vision for Parks, People and Landscapes*. Tennessee Department of Environment and Conservation. Nashville, Tennessee.
- Trust for Public Land. 1999. *The Economic Benefits of Parks and Open Space: How Land Conservation Helps Communities Grow Smart and Protect the Bottom Line*. 48 pp. http://tpl.org/index.cfm?folder_id=2105.
- University of Idaho. 2003. *Elements Of A Behavioral Definition Of Outdoor Recreation*. College of Natural Resources, University of Idaho, Boise, ID. 1 pp.
- U.S. Census Bureau. 2012. *State and County Quick Facts*. US Department of Commerce. <http://quickfacts.census.gov/qfd/states/04000.html>
- U.S.D.A. Forest Service website: www.fs.fed.us
- U.S. Fish & Wildlife Service, 1991. *National Wetlands Priority Conservation Plan*. Service Publications Unit (Region 8). Arlington, VA www.fws.gov/policy/660fw4.html
- U.S. Fish & Wildlife Service, 1996 *National and State Economic Impacts of Wildlife Watching*, (Arlington, VA: U.S. Fish & Wildlife, April 1998), 3-5. for Agriculture in the Environment, DeKalb: Northern Illinois University. <http://farm.fic.niu.edu/foe2/>
- U.S. Fish & Wildlife Service, 2007. *2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation: National Overview*. Preliminary Report issued May 2007. U.S. Dept. of the Interior. <http://federalassst.fws.gov/surveys/surveys.html>
- White, Dave D. Ph.D. & Virden, Randy J. Ph.D. 2003. *Arizona State Parks Consumer Marketing Study*. Arizona State University, Recreation Management and Tourism, Tempe, AZ
- Wilson-Doenges, G. 2000. *An exploration of community and fear of crime in gated communities*. Environment and Behavior, 32. Pp. 597-611.
- Young, Ty. 2006. *City recreation sports going private: Leaders seeking out for-profit athletic firms*. The Arizona Republic
- Zaradic, P.A., Pergams, O.R.W., Kareiva, P. 2009. *The impact of nature experience on willingness to support conservation*. PLoS ONE 4(10): e7367. doi: 10.1371/journal.pone.0007367